

THE MUSEUM  
of  
FAR EASTERN ANTIQUITIES  
(Ostasiatiska Samlingarna)  
STOCKHOLM



Bulletin N:o 6

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Stockholm 1934



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The figure reproduced on the cover of this Bulletin is a Neolithic ceramic object from the Pan-shan group of Kansu.





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## P R E F A C E

**The present volume has been devoted entirely to the study of early Chinese bronzes.**

Our collaborator Professor Bernhard Karlgren has published a detailed survey of all known inscriptions upon early Chinese mirrors, as a first instalment of his researches on archaic Chinese bronzes.

Furthermore we have here published a description of our exhibition of early Chinese bronzes (sept. 1933) in an effort to establish a more detailed chronological system than had so far been attempted. In this publication the description to the plates has been prepared by Dr. Nils Palmgren.

Professor Karlgren has for the purpose of elucidating one of the most important points of our bronze-chronology prepared a critical survey of all evidence bearing upon the question of the date of the Piao-bells.

Finally Dr. A. Koch of Darmstadt has contributed a brief note on the historical and ethnological setting of the Huai-style.



# EARLY CHINESE MIRROR INSCRIPTIONS

BY

BERNHARD KARL GRENN

Chinese bronze mirrors are highly appreciated by connoisseurs of Chinese art, and there are a large number of mirrors to be found in Western collections, public and private. This is particularly true of those in Stockholm. The mirrors of the Museum of Far Eastern Antiquities, of the Hallwyl Museum and of Dr. Axel Lagrelius' collection taken together undoubtedly form the most comprehensive mirror collection outside China and Japan. It is but natural that the owners of Chinese mirrors wish to understand something of the details of their treasures, and important contributions have already been made to the interpretation of the mirror designs, first by F. Hirth, and then by various later authors; the fullest investigations have been made by Japanese scholars.<sup>1)</sup> Among Western authors on this subject should be mentioned above all W. Perceval Yetts and Otto Kümmel.

Besides the design proper, there are inscriptions on a great many mirrors, and these are particularly tantalizing to collectors. On the one hand they are mostly written in a script which is not the ordinary *k'ie shu*, book script of the Chinese language, but represents various older stages of the Chinese writing, and moreover often severely maltreated variants of those older scripts, due either to artistic stylization or to vulgar ignorance on the part of the scribe or ineptitude on the part of the engraver. Hence not only the amateur but also the sinologue is often non-plussed when having to decipher an early mirror inscription. On the other hand the content and the language of the inscriptions are sometimes very difficult of analysis: there are frequently allusions to various folk-lore beliefs and taoistic cabalistic ideas very difficult of interpretation, and the textual analysis is made doubly difficult by numerous *kia-tsie* (characters loaned for other words with similar sounds) and erroneous characters.

The mirror inscriptions have so far never been the subject of a comprehensive study. Chinese and Japanese authors transcribe as best they may, but they carefully beware of telling us what they think the sentences *mean*. Western authors

<sup>1)</sup> See the bibliography in: The Eumorfopoulos Collection of Chinese and Corean Bronzes . . . by W. Perceval Yetts, vol. II, 1930. Several new items can now be added, particularly from the Ostasiatische Zeitschrift.

have tackled but a few of the many inscription types. Some of the simplest were given in a free translation by R. Wilhelm in O. Z. 1913. In the English commentary to the *Senoku Seishō* there are a few translations. Yetts has interpreted a dozen in his excellent mirror treatise (*op. cit.*), Kümmel (O. Z. 1930) and A. Ripley Hall (O. Z. 1934) a few more. But on the whole this field has been very little cultivated. Indeed, it is hardly possible to pick out an isolated inscription and translate it correctly (apart from the simplest ones). We have to make a concordance of all the inscriptions known so far, and thanks to the *variants* in each inscription type arrive at a safe interpretation. The following article is meant to be such an inventory. It has a practical goal just as much as a theoretical: it is intended to form a manual for collectors curious to know what is written on their mirrors. With this object in view I have recorded every variant known to me, even very insignificant variations, in spite of the fact that this means in many cases some very tedious repetitions: I wish that every amateur with some knowledge of Chinese writing, or at least every sinologue, even if he is not a palaeographer, may be able to find in my list the key, even in detail, to every mirror inscription that comes into his hands.

There is an important limitation to this programme: I have left out entirely the T'ang and later mirrors; their inscriptions are of a totally different type from those of early mirrors, and they form a subject sufficient for an independent article. Even so it may seem pretentious to aim at completeness as far as the early mirrors are concerned. And it may seem obvious that at a time when there is a great hunt for Chinese mirrors and new types of decoration crop up almost every day, there will be great chances of entirely new inscription types coming to light, or at least important new variants of the already known types. This may be true; and yet I believe that the moment has arrived for establishing at least a preliminary concordance. Chinese and Japanese collectors have been at work for such a long time and recorded so many variants in their publications that the principal inscription types, and also their most important variants, are liable to be at our disposal already. This, at any rate, is what experience seems to indicate. Among the very numerous inscribed mirrors in Swedish collections there are very few indeed which offer any inscriptions or variants not recorded earlier in the Far Eastern publications.<sup>1)</sup>

<sup>1)</sup> I have to thank Professor Yetts for kindly placing at my disposal a few of these works which I have not been able to obtain myself. I take this opportunity for thanking also Mr. Z. L. Yih of the School of Oriental Studies, London, who has given me valuable suggestions regarding the interpretation of some intricate points.

The principal published sources which I have drawn upon are the following:

1. Lo Chen-yü: *Han liang king i lai king ming tsi lu*, an article in Lo's *Liao kü tsa chu* (cf. *T'oung-pao* 1930, p. 444). This is an extremely important and fairly extensive collection of mirror inscriptions, which the author tells us he has brought together through a life-long recording of every variant he has happened to come across. (Curiously enough a few of the undeciphered inscriptions in his earlier illustrated catalogue of mirrors *Ku king t'u lu* have not been inserted in this compendium). This publication of Lo's is so much the more valuable because the author is such an extremely shrewd and well-informed scholar and we can therefore rely implicitly on his decipherings; on several important points he has cleverly corrected earlier misreadings. I shall use here the abbreviation »Lo» for this article.

2. Lo Chen-yü: *Ku king t'u lu*. Abbrev.: *Ku king t'u lu*.
3. Tomioka Kenzō: *Kokyō no kenkyū*. Abbrev.: *Tomioka*.
4. Harada Yoshito: *Senoku Seishō* (*Kankyōbu*). Abbrev.: *Senoku*.
5. Hamada Kōsaku: *Senoku Seishō zokuhen* (*Kankyōbu*). Abbrev.: *Senoku zoku*.
6. Umehara Sueji: *Kankyō no kenkyū*. Abbrev.: *Umehara Kankyō*.
7. Umehara Sueji: *Tōinro Wa Kan kokan zuroku*. Abbrev.: *Tōinro*.
8. Umehara Sueji and others: *Tōkwaan kokyō zuroku*. Abbrev.: *Tōkwaan*.
9. Gotō Moriichi: *Kanshikikyō*. Abbrev.: *Kanshikikyō*.

For further particulars about 3—9 see Eumorfopoulos Catalogue II, Yetts' bibliography.

10. Umehara Sueji: *Ōbei ni okeru Shina kokyō* (Ancient Chinese mirrors existing in Europe and America). Abbrev.: *Umehara Shina kokyō*.

11. Umehara Sueji: *Kan Sankoku Rokuchō kinenkyō shūroku* (Dated mirrors from the time of the Han Dynasties, the Three Kingdoms and the Six Dynasties). Abbrev.: *Umehara Kinenkyō*.

12. Liu Sin-yüan: *K'i ku shī ki kin wen shu*. Abbrev.: *K'i ku shī*.
13. Ch'en King: *K'iu ku tsing shē kin shī t'u*. Abbrev.: *K'iu ku tsing shē*.
14. Kin shī so.

For 12—14 see Eumorfopoulos Collection Catalogue I, Yetts' bibliography. Occasional other sources will be indicated in the text. A great difficulty with the printed sources listed above (apart from 1 and 2) is that the decipherments cannot be relied upon in the same way as those given by Lo Chen-yü in 1. Some mistakes can be readily recognized, where there are reproductions sufficiently clear to

allow of a verification. In certain other cases (where there are no plates) experience from similar inscriptions on mirrors which I have seen myself has made me so suspicious of a version given only in transcription that I have preferred to exclude the whole inscription rather than risk bringing in false materials. I shall mention some such examples in the text below.

There are several more Japanese publications containing inscribed mirrors in Yetts' bibliography; I have examined them all, but they give no materials that are not to be found in the works already mentioned. I have also received recently a big album of Chinese mirrors published in 1933 by Sü Nai-ch'ang: *Siao t'an luan shi king ying*. The reproductions in this work are so poor as to be entirely devoid of value for our purpose here; hardly a single character is readable.

The question how early mirrors are attested in ancient Chinese texts has already been touched upon by various authors. A passage in *Ta Tai li* (chapter *Wu wang tsien tsu*) mentioning a mirror belonging to king Wu, first Chou sovereign, with a moralizing inscription, adduced by Tomioka (p. 2), is late and plainly legendary. Yetts quotes (after de Groot) a story from the *Si king tsa ki* about a find of several hundred iron mirrors in a grave from about 300 B. C.: but, as Pelliot has pointed out (T. P. 1930 p. 389), the *Si king tsa ki* is spurious. I think it useful to record here some entries in early texts bearing upon mirrors, which are called *kien* or *king*.

1. *Shi* king, *P'ei feng*, ode *Po chou*: *Wo sin fei kien* »My heart is not a mirror».
2. *Tso-chuan*, *Hi* 2nd year, *Couvreur* p. 236 (narrative of the year 658 B. C.): *T'ien-to chi kien* »Heaven has robbed him of his mirror» (made him blind to his own faults).
3. *Kuo-yü*, *Tsin-yü* (k. 7, p. 4 a): *Shi i ki wang er pu huo chuei kien* »Therefore they came to destruction and found no mirror for looking backwards» (and taking warning).
4. *Chuang-tsi*, chapter *T'ien tao*: *Sheng jen chi sin tsing hu, t'ien ti chi kien ye, wan wu chi king ye* »The heart of the sage is quiet, it is a mirror (*kien*) of Heaven and Earth, a mirror (*king*) of all things».
5. *Chuang-tsi*, chapter *Ying ti wang*: *Chi jen chi yung sin ju king* »The perfect man employs his heart as a mirror» (adduced by Tomioka p. 5).
6. *Chuang-tsi*, chapter *Tsê yang*: *Sheng er mei ché, jen yü chi kien, pu kao tsê pu chi k'i mei yü jen ye* »The man who is beautiful by nature, other people furnish him with a mirror (i. e. make him know that he is beautiful): if they do not tell

him, he does not know that he is more beautiful than others» (adduced by Tomioka p. 5).

6. Han-fei-tsī, chapter Kuan hing: *Ku chī jen mu tuan yū tsī kien, ku i king kuan mien; chī tuan yū tsī kien, ku i Tao cheng ki . . . . mu shī king, tsē wu i cheng sū mei, shen shī Tao, tsē wu i chī mi huo* »The ancient men, since their eyes were insufficient when they wanted to look at themselves, therefore by aid of a mirror they looked at their faces; since their wisdom was insufficient when they wanted to govern themselves, therefore by aid of the right principles they corrected themselves . . . . If their eyes lost the mirror, they had no means of adjusting their beards and eyebrows; if their persons lost the right principles, they had no means of realizing their errors». This passage has been quoted by Hirth but wrongly translated. These six examples tell us fairly little, for the »mirror» need not have been a real mirror in our sense, it may just as well have been e. g. a reflecting surface of water in a bowl or a tub; it is interesting that the character *kien* 金 occurs also in the sense of a 'big basin' (Chou-li, Biot I, p. 106).

7. Tso-chuan, Chuang 21st year, Couvreur p. 176 (narrative of the year 673 B. C.): *Wang i hou chī p'an kien yū chī* »The king gave him a girdle mirror of the queen's». This passage, quoted already by Hirth, is extremely important, for the Tso-chuan, written about 400 B. C., builds upon various earlier sources, and we have here a clear testimony to the existence of toilet mirrors carried in the girdle in early Ch'un-ts'iu time. But what is meant by a »girdle mirror»? The interpretation offers some difficulty. Couvreur translates: »L'empereur lui donna une grande ceinture avec miroir, semblable à celle de l'impératrice.» Legge: »The king gave him a queen's large girdle with mirror in it.» Both versions are free and built, not on the text itself but on Tu Yü's (3rd c. A. D.) commentary, which says: »*P'an* is a girdle, and it has a mirror for ornament; now the K'iang and Hu of the Western regions have it like that — it is a dress surviving from ancient times». But *p'an kien* of the text cannot mean »a girdle with mirror» — that would require the inverted order: *kien p'an*. *Kien* is the principal word, *p'an* is an attributive phrase. That the two have to be taken together and not separately (not: »gave him a girdle and a mirror») is proved by Tso chuan, Ting 6th year, where *p'an kien* obviously means *one* object: » — — — the Shu tripod of duke Wen, the tortoise-shell of duke Ch'eng and the *p'an-kien* girdle-mirror of duke Ting [who ruled in Wei 588—577 B. C.].» The word *p'an* has in fact two meanings, both amply illustrated by aid of ancient texts by Tuan Yü-ts'ai and Kuei Fu in their commentaries to the Shuo wen (s. v. *p'an*): 1) »a girdle, belt»; 2) »a

pocket, bag» hung on the girdle, for carrying kerchief and small objects; this bag was made of leather on the man's dress, of silk on the woman's dress; hence the radical of the character is sometimes *ko* 'leather', sometimes *mi* 'silk'. Since the early mirrors are so thin and fragile, it is most reasonable to think that *p'an kien* means 'girdle-bag mirror'; this seems more likely than the explanation given by Tu Yü.

8. Chou-li (Biot II, p. 381): »Ils sont chargés de recevoir, avec le miroir Fou-soui, le feu brillant [qui vient] du soleil; de recevoir, avec le miroir simple (*kien*) l'eau brillante [qui vient] de la lune». *Ibid.* p. 492 (K'ao kung ki): »Quand on divise le métal (i. e. copper) et l'étain par moitié, on a la proportion des miroirs métalliques».

9. Chan kuo ts'ê, Ts'i ts'ê l, tells a story about Tsou Ki, who was a minister of king Wei of Ts'i. Tsou was more than eight *ch'i* in height and very beautiful. Dressed in court robe and cap he *k'uei king* looked into his mirror and asked his wife who was more beautiful, himself or a Mr. Sü, living North of the city (the story continues with both his wife and his concubine praising his superiority, and his realizing that after all the one said so because of love and the other because of fear). King Wei reigned 378—343 B. C. Hirth has already quoted the passage.

10. Mo-tsî, chapter 41 (Ming, hia) contains several passages about mirrors, but the text is so badly corrupted that most of them are untranslateable. Sun I-jang (Mo-tsî hien ku), Liang K'i-ch'ao (Mo king kiao shî) and Chang K'i-huang in a recent work (Mo king t'ung kie) have made highly divergent attempts at restitution of the text (cf. also A. Forke, Mê Ti 1922, p. 429 ff.). But one sentence is safe and clear: *lin kien er li, ying tao* »When you stand before the mirror, the image is inverted». And there is no doubt about another sentence beginning: *kien t'uan* »when the mirror is round . . .» The former must refer to a concave mirror. The value of this testimony for dating the existence of mirrors in China of course depends on the age of this Mo-tsî chapter. According to Sun I-jang and Hu Shî it is but a product of the 3rd c. B. C., composed by the »pie-Mo» school of sophists. Liang K'i-chao energetically combats this view and maintains that if the King hia is not so undoubtedly a work of Mo-tsî's own hand, it is certainly either of his own making or of his immediate disciples', whom he taught directly. If this view of Liang's, which he supports with good and to me convincing arguments, is right, then the chapter cannot have been written later than about 400 B. C.

After these preliminary remarks we pass on to the mirror inscriptions. A good many of them are versified, and I shall indicate the rimes throughout. In many

cases the rimes are clear even in the modern pronunciation, and in such verses I give only the modern readings. In many other cases the modern pronunciation conceals the fact that the words did really rime in archaic time; in such verses I shall add in brackets, after the modern readings, the archaic forms such as I have reconstructed them in my articles *Shi king Researches* and *Chinese Word Families* (this Bulletin, vols. 4 and 5).

1. *Kin shi so*, k. 6, p. 1: »The king's days and months». This is repeated 12 times all round the disc of the mirror, and the *Kin shi so* points out that this must refer to the 12 months and must be a wish for many happy days to come. A mirror with the same inscription and arrangement is *inter alia* in Dr. Lagrelius' collection.

2. *Lo*, 1 a: »May you have sons and grandsons». Yetts, Eum. Cat. II, p. 32, has this interpretation (»May [the owner] have his due of sons and grandsons«), whereas B. Laufer (see *ibid.*) wants it to mean: »May it benefit my sons and grandsons« or »may it last so long that it will be of use to my descendants«. Yetts in a lengthy discussion maintains his own interpretation, and he is certainly right. Yet it is not impossible that in its laconic terseness the formula *i tsii sun* is, in a way, a play upon words, so that it conveys both meanings at the same time. It is interesting to examine how the character *i* 宜 is used in our mirror inscriptions. The sense: »It is right that there should be, may you have« is the ordinary and common one: 16 *i kuan chi* »May you have office and rank«; 20: *i kao kuan* »May you have high office«; 27: *i tsiu shi* »May you have wine and food«; 118: *i niu yang* »May you have oxen and sheep«. And a particularly strong support of Yetts' interpretation is given by 247: *kun i tsii sun* »May your Highness have sons and grandsons«, by 251: *to tsii sun* »Many sons and grandsons«; and by 142: *shou ming kiu, pao tsii i sun* »May you have a long life, may you preserve your sons and may you have grandsons«. On the other hand we have the other sense: »To be suitable for, be of use to« in several formulas. We have it in the common formula (139 and *passim*) *i ku shi* »It is suitable for the market«. In 57 we find: *i kia jen* »It is suitable for (should be of use to) a beautiful person (lady)«. With this we might compare the inscription on a Han basin (Jung Keng: Ts'in Han kin wen lu, k. 5, p. 42): *fu kuei ch'ang, i jen* »... may it be of use to people«. In these cases Laufer's sense is undeniable. Now, we might be at a loss to choose between the two meanings when we come across the common formula *i hou wang* (154 and *passim*). Does it mean: »May you become a prince or a king«, or does it mean: »It is suitable for (should be of use to) a prince or a king«? Here again I believe that the

formula conveys both meanings at the same time, as a kind of play upon words. That the former is the principal sense is confirmed by inscr. 191 which has: *kün hou wang* which can only mean: »May your Highness become a prince or a king«, and still more by 167: *shou ju kin shi, wei hou wang* »May your longevity be like that of metal and stone, may you be a prince or a king«, and by 159: *shí nan wu nü wei hou wang* »May your ten sons and five daughters be princes and kings (princesses and queens)«.

3. Lo, 1 a: »May you forever have sons and grandsons».
4. Lo, 5 a: »Great good luck; may you have sons».
5. Tomioka, p. 19: »I have made a bright mirror; great good luck; may you have sons and grandsons».

6. Lo, 1 a: »May you live long and may you have sons«. The characters in this type of inscription are placed so as to make it possible also to read *ch'ang i sheng tsī* »May you forever get sons (i. e. descendants)«. So an identical inscription is read in the Kin shī so. There is, however, in the Lagrelius collection a mirror which has only three characters: *i ch'ang sheng* »(it is right that you should =) may you live long«, and this supports Lo's reading.

7. Lo, 1 a: »May you forever have sons and grandsons; May you be a prominent person received in Imperial audience«. Yet it seems possible that the sense is, after all, quite different. The choice of radicals in the inscription characters is quite careless (cf. 164, where *tso* 'to make' is written with rad. 149 instead of rad. 9), and it might be that 詔 見 stands for 照 見. This possibility is reinforced by the fact that in 249 we have 詔 明 for 照 明. The Shuei king chu has a line about a stone which *ming tsing chao kien* 照 見 *jen hing ming shi king* »is bright and pure and reflects and shows the figure of people, and is called the stone mirror«. Our phrase here, then, might mean: »May [this mirror] reflect the image of prominent people«. Rimes *jen* (níèn): *sun* (swen).

8. Lo, 1 a: »On it [the mirror] there are the P'i-sie and the Hornless Dragon; the roads are passable (i. e. your travelling is safe); may you forever have sons and grandsons; may your longevity be without limit«. Rimes *t'ung*: *k'iung*. The same inscr. in clear reproduction Tomioka pl. 24. The P'i-sie and the Hornless Dragon are both auspicious animals which eliminate baleful influences; hence a traveller who carries this mirror as a charm is safe. P'i-sie means, word by word, 'eliminator of evil'. In the Hou Han shu, chapter Yü fu chí, it is stated that the queen, when going to the ancestral temple, on her hair pins had six auspicious animals, one of which was the P'i-sie. It is further said (*ibid.*) that the Heir Ap-

parent, when participating in sacrifices, had a robe on the girdle of which there was a P'i-sie head of gold. The same was the case with the princesses when they received the insignia of their rank. The Shuei king chu mentions a grave-find of a finely carved animal on which was written: *p'i-sie*. A picture of a P'i-sie is given in the dictionary Ts'i-yüan (s. v. *p'i*). The 道里 or 道理 is the same as *tao-lu* »roads» (see Ueda, Daijiten s. v. *tao*), and the sentence has to be read in the light of our inscription 257. The dangers of travel is a frequently recurring theme in the ancient literature.

9. Lo, 1 b: »May your Highness have office; may you forever have sons».
10. Lo, 1 b: »May your Highness have high office; may you forever have sons and grandsons».
11. Lo, 2 a: »May you forever have high office».
12. Lo, 1 b: »May your Highness have high office».
13. Lo, 2 a: »May your Highness forever have office».
14. Lo, 2 a: »May your Highness have office and rank».
15. Lo, 2 a: »May you have great office and rank».
16. Senoku 15: »It (the mirror) resembles (i. e. in brightness) the sun and the moon; may you have office and rank; may you (i. e. your family) from generation to generation not be extinguished; may you preserve your eight sons». Rimes *yüe* (*ngjwɔt*): *chī* (*d'jɛt*): *tsüe* (*d'jwɔt*). For the first clause cf. inscr. 84 below.
17. Lo, 2 a: »May your Highness's position be that of a dignitary or a minister».
18. Lo, 2 a: »May you forever preserve your official position».
19. Lo, 2 b: »May your position attain to that of one of the three dignitaries». Those were in Western Han time Ta-si-ma, Ta-si-t'u and Ta-si-k'ung; in Eastern Han time T'ai-wei, Si-t'u and Si-k'ung.
20. Lo, 1 b: »May your Highness have a high office; may your position attain to that of a dignitary or a minister».
21. Lo, 1 b: »May your Highness have a high office; may your position attain to that of one of the three dignitaries».
22. Lo, 2 b: »It (the mirror) is as bright as the sun and the moon; may your position attain to that of one of the three dignitaries».
23. Umehara Kankyo p. 41: »The period Kan-lu, 5th year, 2nd month, 4th day, a master of the Shang-fang of the Right has made the mirror; it is pure and bright; may your Highness have high office; may your position attain to that of one of the three dignitaries; may you forever have sons and grandsons». There

are three periods Kan-lu: 53—50 B. C., 256—259 A. D., and 265 A. D. None of them had a »5th year». Since the Shang-fang was divided into the Right, Left and Middle only in Eastern Han time, Umehara (*loc. cit.*) concludes that the year 260 A. D. is meant. As to the Shang-fang, the manufacturing bureau of the court, see Yetts p. 39. Lo, p. 16 a, has the same inscription, yet with *ts'ing ming* for *ts'ing ts'ie ming*, and *pao i ts'i sun* for *ch'ang i ts'i sun*. The *pao* gives here no sense and must be a slip of the scribe.

24. Lo, 2 b: »May your family always be prominent and rich».
25. Lo, 2 b: »Constant joy and prominence and great wealth».
26. Lo, 2 b: »May your family's wealth be a thousand ounces of gold; may your daily profit be a great myriad».
27. Lo, 2 b: »May you forever be prominent and rich, may you enjoy being free from [bad] events; may you have wine and food». Rimes *fu* (*piüg*): *shü* (*düeg*): *si* (*dzięg*). In translating *lo wu shü* one might hesitate between the interpretation just given and: »may you enjoy being free from business (action), being at leisure», then in the taoistic sense of *wu wei* »non-action». Indeed, the mirror inscriptions are strongly imbued with taoistic ideas. But I think the former interpretation is better, for it is supported by inscr. 88, which in a similar context has *k'ü yu shü* »may you escape doleful events».
28. Lo, 3 a: »May you forever be prominent and rich, may you enjoy being free from [bad] events; may you every day have delight; may you have wine and food». Rimes *fu* (*piüg*): *shü* (*düeg*): *hi* (*χięg*): *si* (*dzięg*).
29. Lo, 3 a: »May you constantly be prominent and rich; may you have wine and food; flutes and lutes shall assemble [round you]; beauties shall wait upon you». Rimes *fu* (*piüg*): *si* (*dzięg*): *shü* (*düeg*).
30. Lo, 3 a: »May you constantly be prominent and rich; may you enjoy being free from [bad] events; may you every day have delight; may you obtain what you find pleasure in». Rimes *fu* (*piüg*): *shü* (*düeg*): *hi* (*χięg*): *hi* (*χięg*).
31. Lo, 3 a: »May you have great joy, prominence and wealth without limit; may you be the equal of Heaven and Earth». Rimes *ki* (*g'ięk*): *i* (*gięk*). The 翼 *i*, properly 'a wing', is somewhat enigmatic. There are indeed two possibilities for explaining it.

On the one hand the Er-ya, Shī ku, has the gloss: *i 翼 king ye* »i means respectful, diligently attentive», and this has been applied *inter alia* by the Mao commentary on three passages in the Shī king (odes Liu yüe, Wen wang yu sheng and Hing wei). But in the Wen wang yu sheng example: 以 燕 翼 子 *i yen i ts'i* »and

thereby giving peace and respectfulness to his son» this is plainly nonsense, and Sun I-jang, in a highly instructive chapter in his Chou k'itung shu lin (k. 3, p. 9) gives a thorough analysis of the word. He shows that *i* in this abstract sense means first 'dignified pose, dignified behaviour' and then (by a *chuan chu*) *tsun kuei 尊貴* 'dignified, respected, august'; *i yen i tsī* thus means »and thereby giving peace to your august son», the »august son» being equal to **元子** *yüan tsī*, 'great son'. i. e. 'eldest son', the bearer of the family. This Sun supports by two cases in the Shu king, Ta kao, where **考翼** *k'ao i* (Couvreur pp. 224 and 227), badly misunderstood by earlier commentators, must mean »old men and eldest sons» (of the family). Sun's argument is conclusive, all the more since the sense 'dignified, august' gives a much better interpretation not only of the Wen wang yu sheng passage but also of the Liu yüe clause **有嚴有翼** *yu yen yu i* »he was severe and dignified» (instead of: »he was severe and careful») and of Lun-yü, Hiang tang, 3rd chang: **趣進翼如也** *ts'ü tsin i ju ye* »when he hastened forward he was dignified». In our present mirror inscription this would give a good sense: »may you be as dignified, as august as Heaven and Earth».

On the other hand there is a second possibility. In the K'in fu (Wen süan, k. 18, p. 13 a, Sī pu pei yao ed.) there is the phrase: **雙美並進馬并馳翼驅** where *i* is defined as *tsī 疾* »quickly» by the commentary. Chu Tsün-sheng, in his Shuo wen t'ung hün ting sheng (s. v. *i*) points out that this must be wrong; the parallel with *ping tsin* »advance side by side» and with *p'ien ch'i* »rush forward abreast» shows that *i k'ü* must mean »hasten forward *i* side by side, abreast». This brings in the numerous cases in which *i* is equal to and interpreted as **輔** *fu* »assist». In Shu king, chapter Yi Tsi, the phrase **汝翼** *ju i* (Couvreur p. 51) »you help me» is paraphrased by Sī-ma Ts'ien **輔** *ju fu*. And to Shī king, ode Hing wei, **以引以翼** Legge (p. 475) »they may lead on one another and support one another» Cheng Hüan says: **在旁曰翼** »to be at the side is called *i*» (for further examples see Shī, ode K'üan o, and Tso-chuan, Chao 9th year). There is no doubt, therefore, that *i* in connection with its original sense of 'wing' can regularly mean 'be at the side of'. Thus our mirror phrase here might mean: »May you be abreast with, stand side by side with, be in parity with, be the equal of Heaven and Earth». An interesting parallel is the expression in Tso-chuan, Chao 26th year: »That the rites can serve to govern a country is an old phenomenon; **與天地並** they (the rites) are (abreast with:) contemporaneous with Heaven and Earth».

I think that the latter of these two interpretations is the more likely to be true.

32. Lo, 3 a: »May you have great joy, prominence and wealth; may you obtain what you love; may you have a thousand autumns and ten thousand years; may you have extended years and increased longevity». This inscription is regular on a very frequently occurring type of early mirrors, e. g. Tomioka p. 226, pl. 54, and Tōkwaan 2. The Japanese scholars instead of *té so hao* (Lo Chen-yü) read: *té ch'ang sun* »may you obtain sons forever» (which would be grammatically bad). The graphs are very insidious, and the mistake is excusable; but in both the plates mentioned it can be clearly seen that Lo is right. All the numerous mirrors with this inscription which I have seen myself have *té so hao*. Rimes *hao* (*χōg*): *shou* (*dīōg*).

33. Umehara Kankyo pl. 37: »May you have extended longevity and ten thousand years; may you benefit your father and your mother». It might seem questionable whether the sense is not rather: »May [the mirror] be of benefit to your father and your mother». But the analogy of inscr. 34 speaks in favour of the former version.

34. Lo, 5 b: »May you have . . . years (as 33); may you preserve your father and your mother».

35. Lo, 5 b: »May you have . . . years (as 33); may you have great joy without end».

36. Umehara Kankyo, pl. 37,4: »May you have a thousand blessings and a hundred felicities; may you from above obtain the strength of Heaven». Rimes *fu* (*pīük*): *li* (*līək*).

37. Lo, 3 b: »May you have very superior wealth and prominence; may you forever have joy without end; may you have extended years and increased longevity; may I not be forgotten [by you]». Rimes *yang*: *wang*.

38. Lo, 3 a: »May you have constant prominence and wealth; may you have joy without end; may we forever think of each other; may we not forget each other». Rimes *yang*: *wang*.

39. Tomioka, p. 17, pl. 1,4. Same as the preceding, but for the *wu ch'ang wang* »may we not always forget» = may we never forget; grammatically a curious inversion.

40. Lo, 3 b: »May you have wealth and prominence, peace and joy without end; may we forever not forget each other». Rimes *yang*: *wang*.

41. Lo, 3 b: »May you have constant joy without end».

42. Lo, 3 b: »May you have great wealth and prosperity; may you have joy without end; may you have ten million years; may you have brothers (i. e. may your family be numerous)». Rimes *yang*: *hiung* (*χīwāng*).

43. Lo, 4 a: »May we forever not forget each other.«

44. Umehara Shina *kokyō* p. 84: »May we forever think of each other; may we not forget each other; may you be constantly prominent and rich; may you have joy without end.« Rimes *wang: yang*. Umehara writes *wu siang si* »may we not think of each other» which must be a misprint for *ch'ang siang si*.

45. Lo, 3 b: »May you have constant wealth without end; I would be happy if I were not forgotten [by you].« Rimes *yang: wang*.

46. Lo, 4 b: »May you have constant joy without end; may we forever not forget each other.« Rimes *yang: wang*.

47. Lo, 4 b: »May you forever have joy without end; may we eternally not forget each other.« Rimes *yang: wang*. *Kiu* 'nine' is *kia tsie* for *kiu* 'eternal'.

48. Lo, 4 a: »I wish that we may constantly think of each other.«

49. Tomioka p. 91: »If we for long do not see each other, may I forever not be forgotten [by you].«

50. Lo, 4 a: »If . . . other (as 49), may we forever not forget each other.«

51, 52. Lo, 4 b: »When we see the light of the sun, may we forever not forget each other.« Rimes *kuang: wang*.

53. Lo, 4 b: »When the world is greatly bright, I would be happy if I were not forgotten [by you].« Rimes *yang: wang*.

54. Lo, 4 b: »May you be as unlimited (i. e. eternal) as Heaven; may you be as long-lasting as beauty; may you have delight and joy without end; may we forever not forget each other.« Rimes *ch'ang: wang*. The expression *yü t'ien wu ki* »unlimited (together with, in parity with =) as Heaven» occurs e. g. in *Ts'ien Han shu*, *Wu ti ki*.

55. Lo, 5 a: »When you see the light of the sun, may you forever have joy without end.« Rimes *kuang: yang*.

56. Lo, 6 a: »The beautiful lady and the great king, in their hearts they think [of each other] and will not forget [each other].« Rimes *wang (giwang): wang (miwang)*.

57. Lo, 6 a. »[This is] a mirror that reflects the brightness, it resembles the light of the sun and the moon; it is suitable for a beautiful person (lady); may you have peace and joy without end.« Rimes *kuang: yang*. It may seem strange that I translate the first two characters in this way. 明 *chao* is a synonym of 明 'bright', and the combination *chao ming* 'bright' is well-known and common (see *Ts'i-yüan*). So why not translate: »[This is] a bright mirror, it resembles the light of the sun and the moon?« My reason is that a comparative study shows that 明 *chao* in

our mirror inscriptions (if we leave this one aside) never means 'bright' but is a simplified form of 𩫑 'to reflect, to reflect light, to illuminate, to show the image of, to look at one's image'. So we have it in inscr. 63: *chao hou wang* »it will reflect the image of princes and kings»; 78: *chao ch'a i fu* »[by it] you will reflect the image of and examine your dress»; 87: *chao mao ming king* »the bright mirror which reflects the image of the figure»; 104: *chao yü kung shi* »it illuminates in the chamber of the palace»; 256: *chao T'ien liang* »it illuminates the T'ien liang palace»; 90: *chao ts'i ming king* »look at one's image in this bright mirror»; 207: *chao ch'e lao shou* »the one who looks at his image [in the mirror] will have high age». Particularly interesting is the very combination *chao ming* in 84: *nei ts'ing i chao ming*. That *chao* here is a verb and that it means: »its interior is pure and thereby reflects the light» is shown by 86, where the same formula is written *nei ts'ing i 𩫑 chao ming*, and by 249, where we have *k'o i 詔明* »it can reflect the light» (I therefore cannot accept Yetts' translation of this formula, Eum. Cat. II, p. 52). Moreover, the ordinary and quite regular predicate of the mirror in the inscriptions generally is not the adjectives *chao ming* but *ts'ing ming* (*ts'ing er ming*, *ts'ing ts'ie ming*, *passim*) »pure and bright». For all these reasons I have adopted the translation above.

58. Lo, 5 a: »Great good luck».
59. Lo, 5 a: »When you see the light of the sun, the world is very bright». Rimes *kuang: ming* (*miāng*).
60. Tomioka p. 227: »When . . . bright (as 59); the one who uses [the mirror] will be a prince or a minister». Rimes *kuang: ming* (*miāng*): *k'ing* (*k'īāng*).
61. Lo, 5 b: »When you see the light of the sun the world is very light; the one who carries [the mirror] will be a prince or a minister». Rimes *kuang: yang*: *k'ing*.
62. Umehara Shina kokyō p. 22: »When . . . light (as 61); the one who carries [the mirror] will be a prince or a king; may you have a thousand autumns and ten thousand years; may you forever have joy without end». Rimes *yang: wang*: *yang*.
63. Lo, 5 b: »When . . . bright (as 59); [the mirror] shall reflect the image of princes and kings; may you live long, without end». Rimes *ming* (*miāng*): *yang*.
64. Lo, 5 a: »When you see the light of the sun, what you say will be true». Rimes *kuang: tang*.
65. Lo, 6 a, Tomioka pl. 2: »May your longevity be like that of metal and stone; [may you have what is] fine and good».

66. Lo 6 a: »May . . . stone (as 65); [may you last for] many generations, without end». Lei means 'accumulated, several, many'.

67. Lo, 6 a: »May you live like (as long as) the stone of the mountains».

68. Lo, 4 a: »Sadly I think [of you] since we have been . . . ; I long to see you and not be taken away [from you]; I think of you and wish that we shall not be separated from each other». Rimes *t'o* (*t'wāt*): *tsüe* (*dz'iwat*). The missing character must reasonably be *li* or *pie* 'separated'. The char. *shuo* stands for *t'o*, as often in the classics.

69. Lo, 4 a: »Since your Highness has to go away, your slave girl (wife) has grief; for the going (parting) there is a [fixed] day, for the return there is no fixed time; I wish that your Highness feeds well and makes great exertions; I look up to Heaven and sigh greatly; forever I shall think of you . . . » Rimes *yu* (*ȝōg*): *k'i* (*g'ȝəg*): *chi* (*t'ȝəg*): *si* (*sȝəg*).

70. Lo, 7 a: »The autumn wind rises; my mind is sad; for long I have not seen you; my serving in your presence is rare (it is but seldom that I wait upon you)». Rimes *peı* (*pıər*): *hi* (*χıər*).

71. Tomioka p. 91: »For long . . . rare; the autumn . . . sad (as 70)».

72. Lo, 6 b: »I refine and work the flower (essence) of the copper, it is pure and bright; from it I make a mirror; it is right that it should have (it is suitable for) a decoration; may you have a long run of years and increased longevity; may [the mirror] eliminate what is baleful; may you be unlimited . . . ; it [the mirror] is like the light of the sun and the moon; may you have a thousand autumns and ten thousand generations; may you have joy without end». Rimes *ming*: *chang*: *siang*: *kuang*: *yang*. I do not translate *wu ki ju jì yüe kuang* as one clause: »may you be as unlimited as the light of sun and moon», because the rhythm shows that two words have been skipped, and inscr. 73 tells us that the sentence should run thus: *yü t'ien wu ki, ju jì yüe kuang*.

73. Kin shī so 6,32: »I refine and work the copper and the tin; they are pure and bright; from them I make a mirror; then I apply a decoration; may you have extended years and increased longevity; may [the mirror] eliminate what is baleful; may you be as unlimited as Heaven; [the mirror] is like the light of the sun; may you have a thousand autumns and ten thousand years . . . » The last word *ch'ang* shows that the inscription is interrupted. Rimes *ming*: *chang*: *siang*: *kuang*.

74. K'i ku shī 15,30: »I refine and work the flower (essence) of the lead; it is pure . . . baleful (as 72); may you be as long-lasting as Heaven; [the mirror]

is like the light of the sun and the moon; may ten million mornings come [to you]; may you have joy without end». Rimes *ming: chang: siang: kuang: yang*.

75. Umebara Shina *kokyō* p. 32: »I refine . . . moon (as 74, only: «it is greatly suitable for a decoration»); may you have a thousand autumns and ten thousand . . .»

76. Tōinro pl. 10: »I refine . . . baleful (as 72, yet some characters are unreadable); may you be bright and brilliant and lucky and prosperous; may you be prominent and a prince or a king; may your sons and grandsons be lucky and prosperous». Rimes *ming: chang: siang: ch'ang: wang: ch'ang*.

77. Lo, 6 a: »I purify and refine the flower (essence) of the copper; from it I make a mirror; its tassels are numerous; it serves as a token of fidelity; it is pure and bright; it is suitable for a beautiful person (lady)». Rimes *sin (sien): jen (ni'en)*. The tassels refer to the silk strings put through the knob.

78. Lo, 6 b: »I purify . . . copper (as 77); [by it] you will reflect the image of and examine your dress; you will look at your figure; its tassels . . . person (as 77)». Tomioka p. 79, pl. 19 has the same inscription (yet *tso* 'make' instead of *wei*), but he has read it wrongly in several places, as can be seen by aid of the plate. A very similar inscription Tōkwaan 8 is obviously so erroneously deciphered that it is not safe to reproduce it; the illustration is not sufficiently clear to make a detailed correction possible.

79. Lo, 7 a: »May you every day have delight; may you every month have wealth; may you enjoy being free from [bad] events; may you have wine and food; in your living may you be sure of tranquillity; may you be free from sorrow and anxiety; flutes and lutes shall assemble [round you]; may your heart and mind rejoice . . .». Rimes *hi (xięg): fu (pięg): shi (dzięg): si (dzięg): an: huan*.

80. Museum of Far Eastern Antiquities 11000:520: Same as 79, only the rhythm is different owing to the introduction of two four-syllable lines: *lo wu yu shi, kii er pi an*.

81. Hallwyl Museum, L 8: »May you every day have delight; may you have wine and food; may you constantly be prominent and rich; may you enjoy being free from [bad] events». Rimes as 79.

82. Lo, 6 b: »May you . . . events (as 79); may you constantly have your will (what you wish); beauties shall assemble [round you], flutes and lutes shall wait upon you; your business shall be prosperous; all things shall be peaceful; the old ones shall revert to being vigorous people; they shall again live in repose». Same

inscr. Tomioka p. 78, pl. 19 b. Rimes *hi* (χjəg): *fu* (pʃüg): *shi* (dʒəg): *i* (jəg): *shī* (dʒəg); *ch'eng* (d'ʒəng): *ting* (tieng): *ning* (nieng).

83. Lo, 7 a: This inscription, which often occurs together with inscr. 84, was first recorded by Sun Sing-yen in his *Sü Ku wen yüan*, k. 14, and also by Ts'ien Chan in his *King ming tsi lu* (in the *Po i lu ts'ung shu*). Both have obvious faults, e. g. last clause *yüan yung si er wu* 純, corrected by Lo into *wu* 純. Reproductions of it are found in Tomioka pl. 18 and pl. 55. The readings are very doubtful on several points. From the introductory phrase: »I purify the fine white metal and serve my prince, I resent that the . . . pleasures hide the brightness (that my merits are not sufficiently estimated by a prince who is devoted only to his pleasures?); and from the clauses *k'ung su yüan* and *ji wang* »I fear that I shall be estranged and from day to day be ever more forgotten», and the final clause: »I wish that we could forever think of each other and not be parted» it follows that it is a discontented and misjudged subject who is speaking, which was recognized already by Ts'ien Chan. This theme, indeed, is very common in the ancient Chinese literature from K'ü Yüan and downwards. Since Professor Yetts has told me that he has collected a great many variants of this inscription, with divergent readings on many points, and since he is making a special study of it, I shall refrain from any attempt to translate the doubtful lines.

84. Lo, 7 a: »Its [the mirror's] interior has a pure substance and thereby it reflects the light; its brilliance is like the sun and the moon; my heart suddenly is elevated and I wish to be loyal; but [the feeling] is obstructed and does not find vent». Rimes *yüe* (ngjwət): *sie* (sjat). Here, again, we have the loyal subject who does not feel sufficiently appreciated. *Chao ming* is equal to the *chao ming* in inscr. 86, and therefore *chao* is a verb. Cf. inscr. 57 above. This is a very common inscription. A mirror with it is exhibited in the Victoria and Albert Museum in London. I have also seen specimens of this inscription which have 徹 'to penetrate, burst through, find vent' instead of *sie*. *Ch'ē* was Arch. *t'jat* and rimes with *ngjwət* just as well as *sie* (sjat).

85. Tomioka p. 76, pl. 18 and p. 230, pl. 55: Translation as 84. Tomioka reads the third word *shī* 'great' and the ninth *cho* 'high', but that is wrong. He based his version upon Sun Sing-yen, but the plates clearly show that the inscription should be read according to Lo Chen-yü's version: *shī* should be *chī* 'substance' and *cho* should be *siang* 'resemble'. Yetts (Eum. Cat. II p. 52) has the same inscription and reads *shī* 'great' as Tomioka, but neither *cho* nor *siang* but 易; the plate (VIII) seems to me to support neither of his readings; here again Lo's readings are to

my mind the correct ones. Yetts gives a translation quite different from mine; he has recently told me however that he has arrived at another opinion of its purport.

86. Röhss Museum, Göteborg: »Its interior is pure and thereby it reflects the light; its brilliance resembles the sun and the moon». Observe the *chao* with radical 86. This abbreviated verse is quite common. On many specimens of this inscription a  *er* which does not influence the sense is inserted after every word, or at least after many words (see e. g. Tōinro 5), in order to fill out the space. This *er* has sometimes been misread  *t'ien*.

87. Lo, 6 b: »The bright mirror, which reflects the figure, knows people's feelings; to the left the Dragon and to the right the Tiger . . . the blue [vault of] Heaven; the Red Bird and the Black Warrior follow the norm of (symbolize) the various stars; may your eight sons and your twelve grandsons live in peace and repose; may you have wine and food; may you enjoy a long life». Rimes *ts'ing* (*dz'ięng*): *ts'ing* (*ts'ieng*): *sing* (*sieng*): *ning* (*nieng*): *sheng* (*sëng*)).

In the first clause 譚 stands for : the mirror sees the expression of your face, you cannot hide your feelings to the mirror. In the second clause the *ts'ing* has a radical 140 which is a mere superfetation.

For the symbolical rôle of the four animals, Tiger, Dragon, Red Bird and Tortoise (»Black Warrior»), which represent the Four Quadrants of the vault of heaven, each including seven of the 28 »mansions» of the Chinese uranoscope, see the excellent treatise in Yetts, Eum. Cat. II, p. 33. Yetts says: »Apart from the Chou li passages, mentioned below, perhaps the earliest account of the symbolic group is to be found in Huai-nan-tsī, the compilation which was submitted in 139 B. C. to the emperor by Liu An, prince of Huai-nan». There is, however, a text which Yetts has not adduced, but which is of considerable interest: the K'ü li chapter of the *Li ki*. Though the *Li ki* was collected into a whole only in Western Han time, most of its documents are decidedly older, and the K'ü li is certainly a Chou time work. There we find: »When [the army] is marching, one has in front the Red Bird, and at the back the Dark Warrior, to the left the Blue Dragon and to the right the White Tiger; the *chao-yao* (i. e. a star in the Ursa major) is above — all to stimulate their (the soldiers') fury». Both Legge (S. B. E. XXVII, 91) and Couvreur (*Li ki* p. 35) have filled out the text to the effect that there was »a banner with the Red Bird» that was carried in front etc. But the text has nothing of the kind. And the earliest commentator, Cheng Hüan, (†200 A. D.), gives a different idea: »That the army is drawn up [for marching] with these four animals

is in imitation of Heaven (i. e. the four divisions of heaven, which they symbolize by representing certain constellations) . . . Furthermore one depicts the star Chao-yao on a banner». There is rather an antithesis here, which shows that Cheng meant a banner only for the star, not for the animals. And the conscientious K'ung Ying-ta, the authoritative commentator of Li ki in T'ang time, says »it is unknown what the animals were made of; when an army in our times marches, they depict these four animals on banners, in order to indicate right and left, front and back.»

88. Lo, 8 a: »The Kü-hü, king of horned animals, every day brings delight; may you have extended years and increased longevity; may you escape doleful events; may you forever have joy, for ten thousand generations; may you have wine and food; may your sons and grandsons be sage; may your house be greatly rich». Rimes *hi* (χὶ<sup>ə</sup>g): *shī* (dʒὶ<sup>ə</sup>g): *sī* (dzὶ<sup>ə</sup>g): *fu* (pὶ<sup>ə</sup>g). About the fabulous animal Kü-hü, or, as the full form runs: 虬 Kung-kung-kü-hü, we have information from various sources. Er-ya, Shī ti: »In the Western regions there is an animal which sits on [another animal's] shoulder, which associates with the Kung-kung-kü-hü. For the Kung-kung-kü-hü it bites (nips) the sweet herbs; when there is danger, the Kung-kung-kü-hü takes it on his back and flees; its name is called Küe». The Lü shī ch'un ts'iu (3d c. B. C.), Shen ta lan, Pu kung p'ien, tells very much the same tale: »In the Northern region there is an animal, its name is Küe; its front part is that of a rat, its hind part is that of a hare; if it hastens, it stumbles; if it runs, it topples over; it always picks sweet herbs for the Kung-kung-kü-hü and gives them to him; if there is danger or harm for the Küe, the Kung-kung-kü-hü unfailingly takes him on his back and runs». The commentator of Er-ya, Sun Yen (3rd c. A. D.) says: »The Kung-kung-kü-hü has a shape like a horse; his front legs are those of a deer, his hind legs those of a hare; his front part is high and he cannot manage to eat (to graze), but he is good at running». The Mu t'ien tsī chuan (a Chou time work) says: »The Kung-kung-kü-hü in one day runs 500 li». Another explanation of the line *küe wang kü-hü* of our inscription, which is very wide of the mark, is given in Kin shī so 6,35.

89. Lo, 8 a: »The Kü-hü, king of horned animals, eliminates what is baleful; the Blue Dragon and the White Tiger are divine and brilliant; the Red Bird and the Black Warrior rule the Yin and Yang principles; may the country truly obtain happiness; may the house be rich and prosperous; may you forever have sons and grandsons; may you have joy without end». Rimes *siang*: *ming* (mὶ<sup>ə</sup>ng): *yang*: *ch'ang*: *yang*. I have translated the *chī* of *chī niao hüan wu chī yin yang* by »rule».

This is because the same inscription recurs in a Japanese album Kankyo senshu, no. 11 (badly misread in four places) and there it is a clear **主** *chu* instead of *chi*, which latter gives no sense here. *Chi* must be a slip of the artisan, due to the similarity of the two characters.

The expression *chu yin yang* calls for a closer examination, inasmuch as there are several variants in the wording. Its purport is clear: the Red Bird corresponds to South and summer, i. e. yang, the Black Warrior (tortoise) corresponds to North and winter, i. e. yin (see Yetts p. 34). *Chu* therefore means 'to rule, to regulate, to dispose': the Red Bird occupies one side of the mirror and dominates the yang force, the Black Warrior occupies the opposite side and dominates the yin force. It must be remembered that much attention in the decoration of mirrors is paid to the magical task of warding off evil influences (for which purpose auspicious animals are largely introduced, Kü-hü, T'ien-lu, P'i-sie, Lion etc.), and a fundamental condition for good luck is a harmonious blending of yin and yang. Hence the common variant 調 *t'iao yin yang* (165 and *passim*) »the Red Bird and the Black Warrior harmonize yin and yang». *T'iao* like *chu* is a transitive verb. As a transitive verb I also take the 利 *li* in 167: »the Red Bird and the Black Warrior *li yin yang* make yin and yang beneficial». On the other hand we have the very common variant 順 *shun yin yang* (99 and *passim*). This *shun* I take in its ordinary intransitive sense 'to follow, obey, adapt oneself to, be in harmony with, conform to': »The Red Bird and the Black Warrior conform to yin and yang».

This gives us the key to the very curious formula of inscr. 240: »the Red Bird and the Black Warrior 赴 *fu yin yang*». *Fu* means 'to run to, hasten to, go and deliver a message'. This gives no sense whatever, and 赴 *fu* — if it is correctly read by Umehara; his plate 45 is not clear enough to allow of any check — must be a kia-tsie (as so many others) for a homophonous word 撫 *fu* (both Anc. Chin. *p'iu*). Now this 撫 *fu* has exactly the sense of 順 *shun* 'to conform to' and is well-known from a very similar context: Shu king, Kao-yao mo: 撫子五辰 'to conform to (follow, adapt oneself to, accord with) the five periods of the year'. *Fu yin yang* on our mirror 240 would therefore be synonymous with the common *shun yin yang*.

90. Lo, 8 b: »The Kü-hü, king of horned animals, every day brings delight; when one reflects one's image in this mirror, it truly delights one's mind; on it are the Dragon and the Tiger, and the four seasons are disposed; may you long preserve your two parents; may you enjoy being free from [bad] events; may your sons and grandsons be obedient and peaceful; may your house be rich and

brilliant; may you be as unlimited as Heaven; may you obtain great happiness». Rimes *hi* (χὶəg): *i* (ὶəg): *chī* (tiəg): *shī* (diəg): *ch'i* (t'iəg): *fu* (piəg).

»The four seasons are disposed» refers to the four symbolical animals, which correspond to the four seasons, see Yetts p. 34. Same inscription in *Kin shī so* 6,37, though with several obviously wrong readings.

91. *Kin shī so* 6,5: »When one . . . mirror (as 90); it delights one's mind; to the left is the Dragon and to the right is the Tiger, and the four . . . events (as 90); may you forever have sons and grandsons, and may your house be greatly rich; may I be preserved as long as your Highness, and may we always remember each other». Rimes *i* (ὶəg): *chī* (tiəg): *shī* (diəg): *fu* (piəg): *i* (ὶək).

92. *Lo*, 7 b: »If you ascend the T'ai-shan, you will see the divine men; they eat the essence of jade; they drink the limpid spring; they have attained to the Way of Heaven; all things are in their natural state; they yoke the Hornless Dragon to their chariot; they mount the floating clouds; may you have office and rank; may you preserve your sons and grandsons». Rimes *jen* (níən): *yün* (giən): *sun* (swən).

This inscription is strongly imbued with taoism. The T'ien tao, Way of Heaven, is the taoistic Tao. *Wu tsī jan* »the things are in their natural state» means that *wan wu* »the ten thousand things», all beings and existing things, the creation, are in their unsophisticated, natural state, restful, free and without coercion, free from the striving, activity, ambition that characterize society as a degenerate form of existence. This taoistic ideal has been beautifully painted in *Lao-tsi* and *Chuang-tsi*.

93. *Tomioka* 45, pl. 6: »If you ascend the Hua-shan, you will see the immortals; they eat . . . spring (as 92); they yoke the Blue Dragon to their chariot, they mount . . . grandsons (as 92); may your prominence and wealth be splendid; may you have joy without end». Rimes *jen* (níən): *ts'üan* (dz'iwan): *yün* (giən): *sun* (swən); *ch'ang*: *yang*.

94. *Lo*, 7 b: »If you ascend . . . spring (as 92); they yoke . . . clouds (as 92); the White Tiger pulls, and they go straight up to Heaven; may you obtain a long life; may your longevity be of ten thousand years; may you have . . . grandsons (as 92)». Rimes *jen* (níən): *ts'üan* (dz'iwan): *yün* (giən): *t'ien* (t'ien): *nien* (nien): *sun* (swən). This inscription is to be found also in the *Kin shī so*.

95. *Tōinro* 14: Same inscr. as 94 abbreviated.

96. *Lo*, 7 a: »[The immortals] yoke the flying Dragon to their chariot, they mount the floating clouds; if you ascend the T'ai-shan, you will see the divine

men; they eat the essence of jade; they taste the yellow gold; may you have office and rank; may you preserve your sons and grandsons; may you forever have joy without end; may you have great wealth and prosperity». In this inscription the traditional order of the lines has been inverted. An identical inscription on a mirror in Lagrelius' collection has 非 *fei lung*.

97. Lo, 8 a: »If you ascend the Hua-shan, the phoenikes will assemble [round you]; you will see the divine men; may you be preserved forever; may your longevity be of ten thousand years; after a completed life cycle may you revert to the beginning (start afresh); may you transmit it to sons and grandsons . . .». Rimes *tsi* (*dz'ięp*): *kiu* (*küg*): *shī* (*śieg*). The first is an irregular and faulty rime, to which however there are many parallels.

98. Lo, 8 a: »If you carry this mirror, you will see the great divinities . . .; may you forever be rich and prominent; may you be free from sorrow and anxiety; the mirror is pure and bright; may you preserve your sons and grandsons». Rimes *shen* (*d'ięn*): *huan* (*g'wan*): *sun* (*swən*).

99. Lo, 8 b: »Han has good copper, which comes from Tan-yang; I have mixed it with silver and tin, it is pure and bright; to the left the Dragon and to the right the Tiger rule the four quarters; The Red Bird and the Black Warrior conform to the yin and yang forces; may your eight sons and nine grandsons govern the centre». Rimes *yang* (*djang*): *ming* (*mjäng*): (*p'eng* =) *p'ang* (*b'wáng*): *yang* (*djang*): *yang* (*iang*). Tomioka pl. 6 has the same inscr., yet with 名 *ming* 'famous' instead of *shan* 'good' (copper). A fine reproduction of a mirror with the same inscr. in Tokwaan pl. XVII.

It is necessary here to discuss at length the expression *chi chung yang* 'govern the centre'. Let us survey the following formulas:

- Inscr. 166: *Tsī sun* 備 *pei* *kü* *kü* 居 *chung yang*;
- 102: *Tsī sun* 服 *fu* *kü* *kü* 居 *chung yang*;
- 108: *Tsī sun* 服 *fu* *kü* *chi* 治 *chung yang*;
- 99: *Pa tsī kiu sun* *chi* 治 *chung yang*;
- 170: *Po hu shī-tsī* 居 *kü* *chung yang*.

First it should be remarked that 服 *fu* (*b'jük*) — or the rarely occurring 復 *b'jók* — is but a loan (*kia-tsie*) for *pei* (*b'ięg*), *fu* *kü* and *pei* *kü* both meaning »all complete».

The first of the above formulas Yetts, in our inscr. 166, taken from the Eum. Cat. II, p. 53, translates: »The Twelve Branches, all complete, occupy the centre» (of the mirror). He does not even indicate his reasons for translating *tsī sun* 'sons

and grandsons' by 'the Twelve Branches', but they are easy to see. Firstly, the mirror in question has the Twelve Branches (cyclical characters) in the centre; secondly, the expression *kü chung yang* 'are in the centre' can undeniably mean: 'occupy the centre of the mirror', as seen by inscr. 170 above, where it is said: »the White Tiger and the Lion *kü chung yang* are in the centre». Thirdly, the Ts'i-yüan indicates that the **十二子** 'the 12 *tsi*' is equivalent to **十二支** 'the 12 Branches'. But here difficulties begin. For this is not at all in connection with the sense of 'son' of the word **子** *tsi*, but it is an abbreviation for 'the 12 *tsi*, *ch'ou*, *yin*, *mao* etc.', i. e. the Branches, and it is constantly so used in chapter 25 of the *Shi ki* of Si-ma Ts'ien. Now we could accept 'the 12 *tsi* Branches' as a kind of pun for 'the twelve *tsi* sons' and thus imagine that the Branches, thanks to this pun, stand as symbols for sons on the mirror. But this tallies badly with the other inscriptions quoted. We have no inscription speaking of 12 *sons*, but always of 8 sons (99) or 5 sons (139) or 9 children (139) or 7 sons (253) or 10 sons (159). In our inscriptions 99 and 104 »8 sons and 9 grandsons govern the centre», »8 sons and 12 grandsons govern the centre» the figures cannot possibly refer to any »12 branches» as a pun for »12 sons». To translate here: »8 sons and 9 grandsons govern the centre of the mirror» is clearly impossible. And yet they are obviously parallels and analogies to inscr. 166. Finally, though Yetts has really the 12 Branches on his mirror (an almost exactly identical mirror, with just the same inscription, is in the Museum of Far Eastern Antiquities, no. K. 11033:17), and though the same is the case with a mirror in Tomioka pl. 5 (in type and decoration very similar to the Eumorfopoulos mirror in question), there are numerous mirrors on which the same phrase occurs: *tsi sun pei kü kü chung yang* and on which, none the less, there are no Branches at all, as e. g. *K'i ku shi* k. 15, p. 38; *Kin shi so* k. 6 p. 8, and so on. It is true that an inscription is often blindly carried over from one mirror to another, and so does not tally with the decoration of the latter. But all these difficulties taken together forbid, I think, Yetts' interpretation. I rather imagine that the idea is the same as when numerous mirrors express a wish for high rank: »may your sons and grandsons live in the centre or govern the centre, i. e. be ministers or high officials in the »centre», the *chung yang cheng fu*, the Imperial capital, the Government.

100. Tomioka pl. 42: »The New Dynasty (Wang Mang) has good copper which comes from Tan-yang; I have mixed it with silver and tin, it is pure and bright». Rimes *yang*: *ming* (*miǎng*).

101. Tomioka p. 160, pl. 42: »The New . . . bright (as 100); to the left the Dra-

gon and to the right the Tiger manage the four quarters; the Red Bird and the Black Warrior conform to the yin and yang forces. Rimes *yang: ming: (p'eng = p'ang: yang)*. Tomioka p. 161 has the same but for Tan-yang 羊 (kia-tsie) for Tan-yang 陽.

102. Lo, 9 a: »Han has good copper which comes from Tan-yang; I have refined and worked [it together with] silver and tin, it is pure and bright; a skilled artisan has engraved it and achieved a decoration; to the left the Dragon and to the right the Tiger eliminate what is baleful; the Red Bird and the Black Warrior conform to the yin and yang forces; may your sons and grandsons be complete in number and be in the centre; may you long preserve your two parents; may your joy and wealth be splendid; may your longevity be like [that of] metal and stone . . . .» The character in the last clause must be a slip of the engraver and stand for 王 (cf. 89 and 163). The missing character must be *wang* 'king': »may you be like a prince or a king». Rimes *yang: ming (mǐng): chang: siang: yang: yang: ch'ang: wang*.

The line *ch'ang pao er ts'in lo fu ch'ang* Yetts (Eum. Cat. II p. 53) translates: »May joy, wealth and prosperity long be ensured to both parents». I do not think that is right. In the first place it is not good to take the whole as one clause; mostly, in our mirror inscriptions, each half of a line like this forms a complete clause in itself; therefore to take *lo*, *fu* and *ch'ang* as three coordinated direct objects to the verb *pao* with *er ts'in* as an indirect object (or a genitive?) in between is grammatically quite doubtful. In the second place, and principally, there are many examples of *ch'ang pao er ts'in* »may you long preserve your two parents», where there is no *lo fu ch'ang* or any object at all following, but a new and independent clause, e. g. 118: *ch'ang pao er ts'in, i tsiu shi* »May you long preserve your two parents; may you have wine and food»; 141: *ch'ang pao er ts'in, li sun tsī* »may you long preserve your two parents; may you benefit your sons and grandsons». Cf. also 256: *ch'ang pao tsī i sun* »may you long preserve your sons and may you have grandsons». The independent sense of *pao* as meaning 'to preserve, keep living and protect, have in good keeping' with a personal object is here quite clear.

103. Lo, 8 b: »Han has good copper which comes from Tan-yang; I have used it and made a mirror, it is pure and bright; may your eight sons and nine grandsons govern the centre; may you have a thousand autumns and ten thousand years; may [the mirror] eliminate what is baleful». Rimes *yang: ming: yang: (yang = siang)*. The last word *yang* is kia-tsie for *siang* 'auspicious'.

104. Lo, 9 a: Han has fine copper, which comes from Tan-yang; . . . . harden

it and make a mirror, it is truly without blemish; I have refined and worked silver and tin [together with it], it is pure and bright; it illuminates in the palace chambers, [it is like] the light of the sun and the moon; to the left the Dragon and to the right the Tiger rule the four quarters; may your eight sons and your twelve grandsons govern the centre». Rimes *yang: shang: ming: kuang: fang: yang*. The phrase *chen wu shang* Yetts (p. 53) translates »it is true and without blemish», which of course is grammatically possible. The parallel with *ta wu shang*, a formula which also occurs on small mirrors and therefore cannot be translated »it is big and without blemish», tells us that *chen* and *ta* are not predicates but adverbs and that we have to translate: »it is truly without blemish, it is greatly without blemish». As to the *chao yü kung shi ji yüe kuang*, it might seem reasonable to translate: »it reflects the light of the sun and the moon in the palace rooms». But it goes against the nature of the Chinese language to separate the object from the verb by an adverbial phrase, and moreover in nine cases out of ten each four-syllable or three-syllable line forms a complete clause in our mirror inscriptions. I therefore take *ji yüe kuang* to be an abbreviation for *ju ji yüe kuang*. It is very common for a character to be skipped in order to gain space.

105. *Kin shi so* 6,35: »Han has good copper, which comes from Tan-yang; I have taken it and made a mirror, it is pure and bright; to the left the Dragon and to the right the Tiger purge the four sides (quarters); may there be extended longevity in the palace halls». Rimes *yang: ming: p'ang*. The word *ju* is kia-tsie for *er*.

106. *Lo, Ku king t'u lu*, B 27: »The mirror produced by me comes from Tan-yang; a skilled artisan has achieved its decoration; it will cause your Highness to get a high office; may you become a prince or a king; may your sons and grandsons be a thousand persons . . . » Rimes *yang: ch'ang: wang*. The rimes show that the verse is unfinished.

107. *Tōkwaan XXX*: »Han has good copper which comes from Tan-yang; a great master obtains the copper, and he completes [the work] in refining together five metals». Rimes *yang: ch'eng (diēng)*.

108. *Lo, 14 a*: »The New Dynasty (Wang Mang) has erected a Pi-yung (Imperial college) and built a Ming-t'ang (Bright Hall, ceremonial hall); may you be illustrious among promoted scholars; may you be the equal of princes and kings; may your sons and grandsons be complete in number and govern the centre». Rimes *t'ang: wang: yang*. For the Imperial college, Pi-yung, see *Li ki*, *Wang chi* (Couvreur I, 281), and for the Bright Hall, *Li ki*, *Ming-t'ang wei* (Couvreur I, 725).

As Tomioka points out (p. 155), the Ts'ien Han shu, Wang Mang chuan, narrates how in the year 4 A. D. Wang petitioned the throne (he had not yet deposed the Emperor) to build a Ming-t'ang, a Pi-yung and a Ling-t'ai (»Spirit terrace«) and to build ten thousand college huts for the students.

Tomioka has the same inscription p. 157, pl. 41. He transcribes 然 *jan* instead of 列 *lie* and 土 *t'u* instead of 土 *shī*; indeed the characters are so cut, but the sense tells us that these are mistakes of the engraver and that Lo's text must be right. Moreover there is the kia-tsie 復具 = 服 = 備.

109. Lo, 14 a: »The New Dynasty has erected a Pi-yung and built a Ming-t'ang; may you be illustrious among promoted scholars and take place among princes and kings . . . .».

110. Tomioka p. 157, pl. 41: »The New . . . kings (as 109); generals and ministers . . . ; then thousand huts of students are in the North; may you have joy without end». Rimes *t'ang: wang: hing (g'āng): fang: yang*. About the huts see 108 above; the undecipherable character prevents a complete translation.

111. Lo, 14 a: »The New Dynasty has erected a Pi-yung and built a Ming-t'ang; Han has brought the Shan-yü to its court, and the Hiung-nu are terrified». The missing character *shan* of *shan-yü*, king of the Hiung-nu, can easily be supplied. 'Brought to its court', i. e. as subject bearing tribute.

112. Umebara Kinenkyō p. 4, pl. 1: »The period Shi-kien-kuo, 2nd year; the New House is august; an Imperial mandate has brought down [on the people] a very great amount of grace; the merchants are busy in the market, those little endowed harvest their fields (as peasants); anew one has made a Pi-yung and instituted schools; the five kinds of grain ripen and the whole country is peaceful; the scholars who have knowledge can be covered with grace; may you have office and rank; may you preserve your sons and grandsons». Rimes *tsun (tswan): en (ēn): t'ien (d'ien): kuan (kwán): an (ān): en (ēn): sun (swan)*. Shi-kien-kuo = 10 A. D. (Wang Mang).

The correct deciphering and explanation of this difficult inscription was first given by Sun I-jang (Chou k'iung shu lin k. 8, p. 4). It is recorded, though badly misread, by Tomioka p. 41 and p. 111, but in Tomioka p. 152 Sun's correct version is reproduced (Tomioka's work is a series of papers of different date, brought together into a volume after his death). Sun I-jang considers 財 to be a kia-tsie for 才 and *pu-ts'ai* to mean 'the stupid ones'. Why not 'the poor ones'? My rendering 'those little endowed' conveys both meanings, which is but right since 財

and 才 (and 材) are etymologically the same word which means 'an asset', be it intellectual or material.

113. Lo, 14 b: »The period... peaceful (as 112); the scholars who are high-minded (have a fine will to do their best) can be... grandsons (as 112)».

114. Lo, 10 b: »Inscribed on green superior [metal]». Cf. inscr. 120 below.

115. Lo, 9 a: »The phoenixes fly about on the sides of the mirror; may one greatly enrich the country, may it receive great happiness...». 賦 stands for 便. Rimes (tsé =) ts'é (tsiək): fu (piük). The missing character is in all probability *kuo* 'country'.

116. Lo, 9 b. »The Shang-fang has made the mirror; may your wealth and prominence be increased and splendid; may its (the mirror's) master's (artisan's) life be long; may the buyer become a prince or a king». Rimes ch'ang: ch'ang: wang. For the Shang-fang see Yetts p. 39.

117. Lo, 10 a: »The Shang-fang has made the mirror, it is bright like the sun and the moon; may you have a never-ending longevity like Tung-wang-kung and Si-wang-mu; may you forever have sons and grandsons; may your position attain to that of one of the three dignitaries; may your Highness have a high office». For Tung-wang-kung or Tung-wang-fu 'Father king of the East' and Si-wang-mu 'Mother queen of the West' see Yetts p. 39.

118. Lo, 12 a: »Mr. Chu's bright mirror delights people's minds; on it are the Dragon and the Tiger, and the four seasons are disposed; may you long preserve your two parents; may you have wine and food; may your Highness have office and rank; may your house have great wealth; may you have joy without end; may you have oxen and sheep». Rimes i (iəg): chi (tiəg): si (dziəg): fu (piük); yang (iəng): yang (ziəng).

119. Lo, 12 a: »... may you have joy without end; may your wealth and prominence be splendid; may it (the mirror) be preserved as long as your Highness; may it outstrip the light of the sun and the moon». Rimes yang: ch'ang: kuang. Pi properly means 'to make inferior': make the light of the sun and the moon seem inferior.

120. Lo, 11 a: »The bright mirror of green auspicious [metal], by it you emit light; holding it you regard the four quarters and you reflect the image of the centre; [on it are] the Red Bird and the Black Warrior, and the Lion soars about; to the left the Dragon and to the right the Tiger eliminate what is baleful; may your sons and grandsons be complete in number and be in the centre; may you long preserve your two parents; may you have joy that never passes». Rimes

*yang: fang: siang: siang: yang: ch'ang.* For the translation of *chao* 'reflect the image of' see inscr. 57 above.

Lo Chen-yü in a short article King hua, following kis King lu in the Liao kü tsa chu, discusses a few points of mirror inscriptions, and he says that the formulas *Ts'ing-kai tso king*, *Ts'ing-sheng*, *Ts'ing-yang*, *Huang-yang*, *San-yang*, *T'ai-shan tso king* etc. are inexplicable. It is quite true that the old interpretation of *Ts'ing-kai* etc. as personal names (Kin shi so etc.) is impossible. Yet it may be permissible to suggest another interpretation at least as a tentative solution of the problem. Let us first examine the occurring formulas:

A. There are a great many mirrors which start with a family name, then mostly followed by 氏 *shi* 'Mr.': 118 Mr. Chu has made the mirror; 122 Mr. Wu; 123 Mr. Wang; 124 Mr. Lung; 125 Mr. Kuang; 126 Mr. Siao; 133 Mr. Chang; 135 Mr. Yin; 145 Mr. Li; 146 Mr. Hü; 153 Mr. Ch'en; 161 Mr. Ts'ai; 180 Mr. Liu; 181 Mr. Yüan; 184 Mr. Tsé; 224 Mr. Shí; 227 Mr. Chi; 229 Mr. Ts'i; 230 Mr. Meng; 240 Mr. Fu; 248 Mr. Tu; 253 San-wu.

B. There are many which start with the pronoun *wu* 'I': *wu tso ming king* »I have made the bright mirror»: 148, 150, 155 etc.

C. There is quite a number of mirrors which start with a place name: 130 *T'ung-liang tso king*; 185 *Kuang-Han tso Shang-fang ming king*; 210 *Kuang-Han Si-Shu ho lien po huang*; 223 *T'ai-shan tso king*.

D. Many mirrors start with 青 羊 *ts'ing-yang* (132), 黃 羊 *huang-yang* (136, 169), 三 羊 *san-yang* (127, 139, 149, 159, 175).

E. Many mirrors start with 青 盖 (120, 128, 141, 142).

F. There are isolated cases of 青 龍 (154) and 青 勝 (114).

In category C it is probable that there has not been an Imperial Shang-fang in Kuang-Han, but that the place names simply indicate the origin of the metal: »Of T'ung-liang [metal] I have made a mirror (130)»; »Of Kuang-Han and Western Shu [metal] I have mixed and refined the white and the yellow [metal]» (210); »Of Kuang-Han [metal] I have produced a bright Shang-fang mirror» (185); »Of T'ai-shan [metal] I have made a mirror» (223). That the adverbial phrase indicating the material can be placed at the opening of the sentence like this and without the use of a preposition is confirmed by 137 and 138, where we find: *Sin yin chi king* »Of new silver I work a mirror».

When we come to category D: *ts'ing-yang*, *huang-yang*, *san-yang*, the question arises whether these cases form a parallel to A, being a man's names, or to category C, the enigmatic *ts'ing-yang*, *huang-yang*, *san-yang* indicating the metal. The

former is *a priori* very unlikely, as already pointed out above; so far Lo Chen-yü is quite right: *san-yang* and *huang-yang* cannot possibly be personal names. That these expressions are really names for the metal of the mirrors and thus analogous to the cases in cat. C is proved by the fact that one of the terms, 三羊 *san-yang*, occurs also in other contexts as a synonym of the 三商 *san-shang* 'three measured [metals]' 三剛 *san kang* 'three hard [metals]', 三銅 *san t'ung* 'three metals' see inscr. 203 below. To say that 羊 *yang* is an »error« for 商 *shang* or a phonetic loan (kia-tsie) is quite unnecessary. That 羊 should mean metal is not at all astonishing. If we examine the use of the character 羊 in our mirror inscriptions, we shall find that it is the perfectly regular graph for 祥 *siang* 'auspicious, lucky'. This word is extremely seldom provided with a radical, 羊 serves as the standard form for it. 羊 *yang* in all these cases has to be read *siang*. Now 三羊 *san siang* 'the three auspicious things' as a term for the three fine metals used for mirrors, the decoration and inscriptions of which are regularly of an auspicious character, is very reasonable. It quite naturally reminds us of the term 吉金 *ki kin* 'auspicious metal, auspicious bronze' which is a common term for archaic bronze objects, a term already occurring in archaic bronze inscriptions (see e. g. Sun I-jang, Ku chou shi i, p. 1 a; Lo Chen-yü, Cheng sung t'ang tsi ku i wen, k. l: 14 etc.). The 三羊 *san siang* 'the three auspicious [metals]' are then the copper, tin and lead spoken of below (p. 53). The 黃羊 *huang siang* 'the yellow auspicious [metal]' and the 青羊 *ts'ing siang* 'the green auspicious [metal]' (cf. the common expression 青銅 'green copper' = bronze) then turn out to be quite simple and natural terms.

We now proceed to the frequently occurring category E.: 青蓋 *ts'ing-kai*, which the author of the Kin shi so first interpreted as a man's name. In my opinion we should not read *kai* at all, but 羊 *yang* = *siang*. We have here only a script variation of the 青羊 just discussed. The character 羊 *siang* has as a superfetation (such superfetations are extremely common in the mirror inscriptions, see the table at the end of this article): the radical 皿 'vessel', natural in a word which deals with the melting of metal (cf. 盧 *lu*). It might be objected that it is too bold to suppose two modifications of 祥: first the subtraction of the radical 示 and secondly the addition of the radical 皿. But it is certainly not, for we have clear parallels in the mirror inscriptions: 紀 first reduced to 已 and then enlarged to 芭 (148). Similarly 祥 first reduced to 羊 and then enlarged to 詳 (122). To my mind it is obvious that there are no *Ts'ing-kai* but only *ts'ing-yang* = *ts'ing-siang* 'the green auspicious [metal]'.

The only real difficulty is caused by the cases F, *ts'ing-lung* and *ts'ing-sheng*. The latter is after all not so bad. It might seem evident, it is true, that the inscr. *Ts'ing-sheng chi* must mean »*Ts'ing-sheng* has made this inscription». But *sheng* 'superior' may be an analogy to *siang* 'auspicious', and the sentence can be explained: »inscribed on a *ts'ing sheng* green superior [metal]». *Ts'ing-lung* is much more enigmatic: is it a fancy name for some kind of alloy?

121. Lo, 8 b: »The Red Bird and the Black Warrior conform to the yin and yang forces; may your eight sons and nine grandsons govern the centre; [by the mirror] you reflect your face and regard your body, it is a perfect image; your clothes are nicely possible to regard; may your Highness have office and rank; may you preserve your sons . . .». The missing character is *sun* 'grandsons'. Rimes *yang*: *yang*: *siang*; *kuan*: *sun* (*swən*). The same inscr. is to be found in the K'i ku shi k. 15, p. 6; there are no 12 Branches on the mirror, and the *chung yang* cannot refer to the middle of the mirror (cf. 99 above).

122. Lo, 13 a: »Mr. Wu has made the mirror, may seasons and days be good; to the left the Dragon and to the right the Tiger eliminate what is baleful; may your two parents be there complete (i. e. neither of them dead); may your sons and grandsons be prosperous; may your longevity be like [that of] metal and stone; may you have joy without end». Rimes *liang*: *siang*: *ch'ang*: *yang*.

123. Tomioka p. 41, pl. 72: »Mr. Wang has made the mirror; the barbarians of the four directions have submitted; much I congratulate the New Dynasty (Wang Mang); the people have got rest; the Hu slaves (i. e. tribes of the North) are destroyed and exterminated; the empire is restored; wind and rain are timely and temperate, the five kinds of grain ripen; may you long preserve your two parents; may your sons and grandsons be strong; may your official position be august and illustrious; may you receive emoluments and food; may you hand it down and thereby inform later generations; may you have joy without limit; may you have great profit». Rimes *fu* (*b'juk*): *si* (*sjək*): *fu* (*b'jōk*): *shu* (*djōk*): *li* (*ljək*): *shī* (*d'jək*): *ki* (*g'jək*). Tomioka has read  instead of , but the plate shows this to be wrong. The phrase »wind and rain are timely and temperate, and the five kinds of grain ripen» occurs in Huai-nan-tsi, chapter 6, p. 6 b.

124. Lo, 13 a: »Mr. Lung has made the mirror; the barbarians of the four directions have submitted; much I congratulate my prince's house; the people have got rest; the Hu and the K'iang (Northern and Western barbarians) have been removed and exterminated; the empire . . . ripen (as 123); may your office . . . food (as 123); may you long preserve your two parents: may you have joy without

end». Rimes (cf. 123) *Fu: si: fu: shi: i* (ziəg). Here for once Lo Chen-yü has an inexactitude. He reads Hu 克 *k'o* instead of Hu K'iang; but on the plate in his Ku king t'u lu (chung, 20), the K'iang is easily readable.

125. Victoria and Albert Museum, show case: »Mr. Kuang has made . . . your two parents (as 124); may your sons and grandsons be strong».

126. Tomioka p. 89: »Mr. Siao has made . . . ripen (as 123); may your official position be august and illustrious, may you receive emoluments and food; may you long preserve your two parents, may your sons and grandsons be strong; may you hand it down to later generations».

127. Tōkwaan pl. XXVIII: »From the three auspicious [metals] I have made the mirror; the barbarians of the four directions have submitted; much I congratulate the country; the people . . . ripen (as 123); may you long preserve your two parents; may you obtain strength from Heaven; may you hand it down . . . limit (as 123). Rimes (cf. 123) *fu: si: fu: shu: li: ki* (g'ięk).

128. Lo, 11 a: »From the green auspicious [metal] I have made . . . Heaven (as 127)».

129. Lagrelius Collection: »From the green auspicious [metal] I have made . . . the country (as 127); the clouds and rain are timely and temperate, the five kinds of grain ripen; may you long . . . limit (as 127)».

130. Tomioka p. 15. »From metal from T'ung-liang I have made the mirror . . . Heaven (as 127); joy!». For rimes see 123.

131. Tomioka p. 159: »Mr. Wang has made . . . Heaven (as 127); may you hand it down and thereby inform the world; may you have joy without limit».

132. Lo, 11 b: »From the green auspicious [metal] I have made . . . ripen (as 127); may you hand it down and thereby inform later generations; may you obtain happiness from Heaven». Rimes (cf. 123) *fu: si: fu: shu: fu* (piük).

133. Lo, 12 b: »Mr. Chang has made . . . rest (as 124); may your office attain to that of one of the three dignitaries; may you obtain happiness from Heaven; may your sons and grandsons be complete in number; may they be filial and strong». Rimes *fu* (b'ięk): *si* (sięk): *fu* (piük): *li* (lięk).

134. Tomioka p. 20, pl. 2: Mr. Kung-x has made . . . limit (as 127); may you mount on the clouds and drive forwards; may you yoke four horses to your chariot; may you accompany all the divinities; may you have grandsons and sons». *Tao-ts'ung* means properly 'to go in front of (lead the way) and follow' i. e. 'escort, accompany'. Rimes (cf. 123) *fu: si: fu: shu: li: ki* (g'ięk): *tsi* (tsięg).

135. Umehara Shina kokyō p. 30: »Mr. Yin has made the bright mirror; the

barbarians of the four directions have submitted; much I congratulate the country; the people have got rest; the Hu slaves are decapitated and exterminated; the empire is restored». 是 stands for 氏. Rimes see 123.

136. Umehara Kankyo p. 179: »From the yellow auspicious [metal] I make etc.».

137. Lo, 14 a: »From new silver I have made the mirror; may your sons and grandsons be complete in number; much I congratulate my prince's house, may it obtain great happiness; may your position attain to that of a dignitary or a minister; may you get regulated your emoluments and your food; may you happily obtain years with well-balanced seasons; may you come into possession of a good virtue; may you hand it down to later generations; may you have joy without limit; great good luck!». Rimes *kü* (g'iu): *fu* (piük): *shi* (d'ięk): *té* (tək): *ki* (g'ięk). The first rime word is irregular and exceptional, cf. Bull. Mus. Far. Est. Ant. 4, p. 173 ff. 'Emoluments' and 'food' are less disparate than it might seem; the salary was paid in grain. *Té* 'virtue' has the original force of the word 'virtue': mental and moral capacity, strength, power. For the phrase *hing té shi nien* one might hesitate between the translation given and: »may you happily obtain seasons and years» with *shi* and *nien* as two coordinated nouns. But since analogous inscriptions above have often had »*feng yü shi tsie*» wind and rain are timely (well-seasoned) and temperate», I think the idea of *shi nien* is 'well-seasoned years', with rain, heat and cold coming in regular, due seasons.

138. Kin shi so 6, 34: »From new silver . . . number (as 137); much I congratulate the country, may it . . . luck! (as 137)».

139. Umehara Shina kokyō p. 11, pl. 48: »From the three auspicious [metals] I have made the mirror; I have my own method; it eliminates what is baleful; it is suitable for the market; may it cause people to have a long life and not know ageing; may you be the father of five sons and four daughters, nine children; may your sons be kings or princes; may your daughters be princesses; may your longevity be like that of Tung-wang-fu and Si-wang-mu». Rimes *ki* (kięg): *shi* (dięg): *fu*: *chu*.

The formula *tsi yu ki* calls for some remarks. Yetts (p. 56) translating a similar formula: **自 有 常** *tsi yu ch'ang* has: »according to the proper pattern». I do not think that this brings out the force of *tsi* 'self' sufficiently. Besides the most common *tsi yu 紀 ki* »I have my own rule, method», we have *tsi yu 常 king* »I have my own norm», *tsi yu 常 ch'ang* »I have my own constant norm, rule», *tsi yu 道 tao* »I have my own way, method», *tsi yu 方 fang* »I have my own recipe,

method», *tsī yu* 意 i »I have my own idea, theory, principle», and then, comprehensible only in the light of the former: *tsī yu* 好 *hao* »I have my own good [principles]», *tsī yu* 真 *chen* »I have my own true [principles]». In them all there is a **自** *tsī* 'self', which I believe has its peculiar force. I think here on the one hand of inscr. 253 »San-wu has made the mirror, it is different from (the crowd, the many =) the ordinary ones», on the other hand of the common formula *yu lien san shang* (176 ff.) »I refine it secludedly . . .». It all refers to the esoteric art of the founder: he works the metal unseen to others, and according to his own private **方** recipe. That the art of the founder had been a sacred esoteric art since the highest Chinese antiquity is well brought out by M. Granet, *Dances et légendes de la Chine ancienne*, pp. 609, 610.

140. Tomioka, 85, pl. 21: »The Shang-fang has made the mirror; it has its own method; it [the mirror] eliminates what is baleful; it is suitable for the market; on it are Tung-wang-fu and Si-wang-mu; it causes (allows) your Highness to mirror [himself]; may you have grandsons and sons». Rimes *ki* (kjəg): *shī* (djəg): *tsī* (tsjəg).

*Yang-suei* is properly a burning mirror. As pointed out already by Tomioka (p. 127), Wang Ch'ung (+ 97 A. D.) in his *Lun Heng* (Shuai sing p'ien, Forke I, p. 378) says: »The yang-suei takes fire from Heaven; in the fifth month, the day [with the cyclical denomination] *ping-wu*, at noon, you melt and refine five ores and found it into a utensil; when you polish it it produces light; if you make it face upwards towards the sun, then the fire comes». *Yang-suei* in this text has been taken to mean 'a burning-glass' (Forke, Giles' dictionary), but its use here on the mirrors shows it to have been a concave mirror — that the concave mirror was known early we know already from Mo-tsī, see the introduction above. We may quote, in this connection, two earlier texts. *Huai-nan-tsī*, *Lan-ming-hün* (k. 6, p. 2 b), which says: »By aid of the *yang-suei* one draws fire from the sun, by the *fang-chu* one draws dew from the moon». *Chou-li*, *Ts'iu kuan*, *Sī hūan shī*: »The officer *Sī hūan shī* (»governor of the fire«) has for office to draw fire from the sun by the *fu-suei*, and to draw clear water from the moon by *kien an* [ordinary] mirror». In the *K'ao-kung-ki* section of the *Chou-li* it is said that this *suei* is made of equal parts of copper and tin, so it cannot have been a burning-lens. The same object is mentioned in the *Nei-tsē* of *Li ki*, under the name of *kin-suei* 'copper suei', and Couvreur (I, p. 621) correctly translates it by 'miroir métallique'. We even get a detailed description of it from Eastern Han time (*Kao Yu*, commentary to *Huai-nan-tsī*, *T'ien-wen-hün*): »The *yang-suei* is of copper (metal); you take a copper

cup without rim, rub it very well so as to make it warm, and when the sun is at zenith you turn it against the sun and receive it with mugwort (artemisia, moxa); then it flares up and you receive fire». The word *yang-suei* then has been generalized to mean simply 'mirror', as in our present inscription.

141. Lo, 11 a: »From the green auspicious [metal] I have made the mirror, I have my own method . . . market (as 139); may you long preserve your two parents; may you benefit your grandsons and sons; may you be an officer and have a high office; may your life be durable». Rimes *ki* (*kὶəg*): *shī* (*dὶəg*): *tsī* (*tsὶəg*): *kīu* (*kὶūg*).

142. Lo, 11 a: »From the green auspicious [metal] I have . . . market (as 139); . . . may your life be durable; may you preserve your sons and may you have grandsons; may you obtain a good . . . ; may you be an officer and have a high office; may your chariot grow ears». Rimes *ki* (*kὶəg*): *shī* (*dὶəg*): *kīu* (*kὶūg*): *er* (*nὶəg*).

The expression »may your chariot grow ears» has been explained already in the *Kin shī* so. There is a passage in the *Ku kin chu* of Ts'uei Pao (4th c. A. D.) which gives us the key to the phrase. Chapter 1, *Yü fu*, p. 3 b: »The 重耳 'double ears' are the same as the 重較 *ch'ung kio* double bars (on the chariot). Civil officers had green (blue) ears, military officers had red ears. Some say that the *ch'ung kio* were on top of a screen of war chariots, rising in a pair like the horns of an ox, therefore they were called *ch'ung kio* (*kio* = 角 *kio* 'horn')». Now the *ch'ung kio* occurs in the *Shī* king, ode *Ki yü*, and there Mao Heng (2nd c. B. C.) says that »*ch'ung kio* belonged to the chariot of a minister». It is generally admitted that the *ch'ung kio* were vertical bars rising at the two front corners of the hack (cf. Legge p. 93). Whether this interpretation is true or the alternative one given by Ts'uei Pao, is immaterial for our purpose here. It is more important that Feng in the *Kin shī* so adduces an example (from the *Han kuan i*) which shows that the term *ch'ē sheng er* 'the chariot grows horns' in this sense was used already in Han time: »To be an official does not consist only in one's chariot's growing ears» (it requires capacity as well). The mirror phrase means: »may your chariot get ears» i. e. may you become a high official.

143. Tomioka p. 66, pl. 12: »Mr. Wu has made the mirror, he has his own method; it eliminates what is baleful; it is suitable for the market; may you be an officer and be promoted, and may your chariot grow ears; may your longevity be like that of Tung-wang-fu and Si-wang-mu; may you have five sons and four daughters, in all nine children; great good luck and profit!». Tomioka has wrongly read

五 for 耳 and 凡 九 he has read as one character 𠂔, which is all very erroneous.

144. Umehara Shina kokyō p. 16: »Mr. Wang has made the mirror, he has his own method; he has refined and worked the pure part of the copper and eliminated the dregs; it [the mirror] eliminates what is baleful; it is suitable for the market; may you long preserve your two parents; may you benefit your grandsons and sons». Here, as in 141 above, it might be tempting to translate: »may the mirror benefit your sons and grandsons». But then we should have to translate also: »may the mirror long preserve your two parents», and that, I think, is not permissible. For we have the phrase *ch'ang pao er ts'in* in many contexts where it cannot be the mirror that is the subject, but *you*: may you long preserve your two parents, keep them alive — the great thing for a dutiful son; so we have it in 118, 120 (cf. also 113) and particularly in 124: »may your official position be august and illustrious, may you receive emoluments and food; may you long preserve your two parents; may you have joy without end». Here there cannot be the slightest doubt that the subject of *ch'ang pao er ts'in* is really *you*, not the mirror; that follows from the context. This being so, I think it best, in our present inscription, to suppose the same subject for the two verbs *pao* and *li*: May you long preserve your two parents, may you benefit your sons and grandsons». The Victoria and Albert Museum (show case) has a mirror with the same inscription, though with 除 instead of *p'i*.

145. Lo, 12 a: »Mr. Li has made the mirror, he has his own method; the Blue Dragon and the White Tiger are to the left and the right; [there are] the Divine Fish and the Immortal Ch'i-sung-tsī; the Eight Birds face each other and follow the norm of Primeval Beginning; may you . . . a long life; may you have sons and grandsons, five sons and four daughters, in all nine children; may you (or: the mirror?) be of use to your mother-in-law and your father-in-law; may you (or: the mirror?) benefit your father and mother; may you be an officer and be highly promoted . . .». Rimes *ki* (*kiəg*): *yu* (*giüg*): *tsī* (*tsiəg*): *shī* (*siəg*): *tsī* (*tsiəg*): *mu* (*meəg*). 固 stands for 妤.

Ch'i-sung-tsī is a *sien* Immortal, who figures very often on mirrors. The name is often badly disfigured by wrong characters (e. g. inscr. 152 below, cf. Lo Chen-yü, King hua). The Lie sien chuan narrates that Ch'i-sung-tsī was »rain-master» at the time of the mythical emperor Shen-nung. He taught Shen-nung the art of going into water without becoming wet and to go into fire without being burned. He went to the K'un-lun mountains and often stayed at Si-wang-mu's cave pa-

lace. He could rise into the air and descend again following the wind and rain. This tao-master is mentioned already in the *Shi ki*, *Liu hou shi kia* (k. 55, p. 6 b). On the other hand the *Shen sien chuan* tells us of a famous tao-master *Huang Ch'u-p'ing*, who together with his younger brother ate of the *fu-ling* »China-root» (Giles' Dict. 3695) and lived for more than 500 years, could walk in the sunshine without throwing any shadow and looked like a young boy. This *Huang* altered his name to *Ch'i-sung-tsí* ('Master of the Red Fir'). There seems to be no connection between the two legends, and it is hard to tell which of these two worthies is meant in our mirror inscriptions. Cf. also inscr. 152.

Finally we have to examine the expression »the Eight Birds». The symbolical birds on Chinese mirrors have been extensively discussed by Yetts, Eum. Cat. II, p. 35. We have here, however, a theme which Yetts had no occasion to enter upon: »the Eight Birds face each other and follow the law of Primeval Beginning (*ku shi* is an expression from *Lao-tsí's Tao tê king*). Having access only to the inscription and not to the mirror it is difficult to analyse the clause in detail; I suppose the distribution of the birds over the surface of the mirror symbolizes the Four Quarters and thereby the »primeval beginning». But what is meant by the »Eight Birds»? There are, I think, good reasons to believe that it is a question of the *luan* 鶯 phoenixes (kindred to *feng*). The Sung dictionary *Pei ya* quotes an older work *K'in king* 'The sacred book of Birds', which says: *I niao yüe kia, er niao yüe ch'ou, san niao yüe p'eng, si niao yüe sheng* etc. . . . *pa niao yüe luan* »One bird is called *kia*, two birds are called *ch'ou*, three birds are called *p'eng*, four birds are called *sheng* . . . eight birds are called *luan*». This means that *luan* is the bird which ritually occurs by eights (and therefore, when there are eight birds of any kind it is called a *luan*). This is borne out by the *Shi king*, ode *Ts'ai k'i*, where it is said *pa luan ts'iang ts'iang* »The eight *luan* bells tinkle». *Luan* is written by the character 'phoenix', and though it is equal here to 鶯 *luan* 'bell', it is acknowledged by all the ancient commentators that the bell is called *luan* either because it had the form of a phoenix bird or the sound of such a bird. Thus etymologically it will always mean »the eight phoenixes tinkle», and it is significant that these birds already in *Shi king* time should be eight in number. That birds on mirrors are often these very *luan* is confirmed by *T'ang* mirror inscriptions, in which the birds of the decoration are expressly stated to be *luan* (see Kümmel, O. Z., N. F. VI p. 175). As birds of good omen we have already met the *feng* phoenixes in inscr. 97, 115.

146. Lo, 12 a: »Mr. Hü has made the mirror, he has his own method; the Blue

Dragon and the White Tiger are to the left and the right; [there are] the Sage Chou-kung and K'ung-tsī of Lu; may you be an officer and be highly promoted, may your chariot grow ears; may you in the district be promoted to Hiao-lien and in the province to Po-shi; if when young you do not exert your forces, when old you will regret it; good luck!» Rimes *ki* (kiəg): *yu* (giəg): *tsī* (tsiəg): *er* (niəg): *shī* (də'əg): *huei* (χməəg). It is interesting to find the Confucian sages Chou-kung and K'ung-tsī in a mirror inscription; they are mostly strongly taoistic. The same inscription is recorded in the Kin shī so.

147. Umehara, Shina kokyō p. 82, pl. 78: »The Shang-fang has made the mirror, it has its own method; the mirror (properly: burning mirror) is brilliant and bright; may you have grandsons and sons; may your longevity be like that of the T'ai-shan; may you have joy without end». Rimes *ki* (kiəg): *tsī* (tsiəg): *i* (ziəg).

148. Museum of Far Eastern Antiquities 11000:524: »I . . . the bright mirror, I have my own method; it causes people to have a long life; may you have grandsons . . . sons».

149. Lo, 12 a: »From the three auspicious [metals] I have made the mirror, . . . my own method; it is bright like the sun and the moon; such have never existed . . . ; . . . great wealth; may you preserve your mother; [may you have] five sons and four daughters, in all nine children; may your daughters have wise husbands; may your sons have good wives». Rimes *ki* (kiəg): *yu* (giəg): *mu* (məg): *tsī* (tsiəg): *fu*: *fu*. The lost characters are *tsī* *yu* I have (my own method); (such have never existed) *shī* in the world; *shou* may you obtain (great wealth). The rhythm shows that before *mu* 'your mother' a *fu* 'your father' has been skipped.

150. Tomioka p. 19: »I have made the bright mirror, I have my own method; it is bright like the sun and the moon; such are rare in the world; may you have extended years and increased longevity». Rimes *ki*: *yu*.

151. Tomioka p. 60: »I have made . . . method (as 150); may you forever have joy without end».

152. Lo, 10 a: The Shang-fang has made the mirror, it has its own method; may you have good seasons and days; may your house have great wealth; may your nine sons and nine grandsons each of them have joy; may your official position attain to that of one of the three dignitaries or of a *chung-ch'ang-shī*. On it are Si-wang-mu and Tung-wang-kung and the Immortals Tsī-k'iao and (Ch'i-yu-tsī =) Ch'i-sung-tsī. Rimes *ki* (kiəg): *fu* (piəg): *hi* (χiəg): *shī* (diəg): *tsī* (tsiəg).

*Chung-ch'ang-shī* was a high military office (see Chavannes, M. H. II, p. 526). *Tsī-k'iao* is quite a puzzle. We often find Ch'i-sung-tsī combined with an Immor-

tal 子高 Tsī-kao (e. g. 227), and Lo Chen-yü, in his King hua, says that Tsī-k'ia is a corruption for Tsī-kao, just as Ch'i-yu-tsī for Ch'i-sung-tsī. This is all very well, but who was this personage? There are indeed several possibilities.

Liu Sin-yüan in K'i ku shī ki kin wen shu proposes 琴高 K'in Kao, who according to the Sou shen ki was a skilled lute-player and henchman of king K'an of Chou (11th c. B. C.). Having wandered in Ki-chou and Cho-chou for 200 years he bade farewell and went down into the Cho water to catch a dragon. He made an appointment with his disciples: tomorrow you must all fast and wait at the side of the water and build a temple room. And sure enough, riding on a red carp (auspicious fish) he came out of the water and sat down in the temple room. There were ten thousand persons who saw him. He stayed for a month and then went down again into the water.

But we may also reflect upon the famous Po-ch'eng Tsī-kao, a prince of mythical time, who resigned his throne and went to live as a taoistic recluse. The Great Yü went to see him, but he did not heed the emperor and continued ploughing. Chuang-tsī tells the story (Legge, S. B. E. XXXIX, p. 315), and his book was much appreciated in taoistic circles.

Again, if the form Tsī-k'iao should happen to be the primary one, we might think of 王子喬 who, according to the Lie sien chuan, had the personal name Tsin and was heir-apparent and eldest son of king Ling of Chou (6th c. B. C.). He was skilled at playing on a reed organ so as to produce the sounds of a phoenix. When he sauntered between the Yi and the Lo rivers, a tao-master Fou-k'iu led him up on Mount Sung (a sacred mountain). After 30 years they sought for him on the mountain. He then saw Huan Liang and said: »Tell my family that on the 7th day of the 7th month they shall wait for me on the summit of Mount Hou-shi. When the time came, he took his place on the top of the mountain, riding on a white crane (symbol of longevity). They could see him from afar but not reach him. He saluted and bade farewell to the secular men. After several days he went away.

And yet it is possible that none of these worthies are indicated in our mirror inscriptions, but another 王喬 Wang K'iao, who seems to have been a taoist of Han time. In the mirror inscriptions Tsī-k'iao is constantly combined with Ch'i-sung-tsī, and Huai-nan-tsī (Ts'i sun hün), a work from the very golden age of early mirror art, has a passage where this combination occurs. It reads: »Now Wang Ts'iao and Ch'i-sung-tsī blow out and draw in, throw out the old [air] and bring in the new [air], leave their bodies and leave their consciousness, keep to

the elemental simplicity (of their beings) and return to the true (essence of their nature) and thereby saunter in the mystic wonder (of the universe) and aloft communicate with (dwell among) the clouds and Heaven». To this the commentator Kao Yu (2nd c. A. D.) says: »Wang K'iao was a man from Wu-yang in Shu (Szechuan), who was an official in Po-jen and found the Tao and became immortal; Ch'i-sung-tsī was a man from Shang-ku (Northern Shan-si)». Thus he speaks of them as being comparatively recent men.

153. Tomioka p. 29, pl. 71: »The period x-shī, first year, Mr. Ch'en has made the mirror, he has his own norm».

154. Lo, 11 b: »From the Green Dragon (? fancy name of some kind of alloy?) I have made the mirror, I have my own rule; may you . . . preserve your two parents; may you be a prince or a king; may it [the mirror] eliminate what is disastrous and bad and drive away what is baleful; may you have joy without end». Rimes *ch'ang*: *wang*: *siang*: *yang*. The word *o* 'bad' is often cut in a curious way (reproduced by Umehara Shina *kokyō* p. 18), and Yetts (p. 56) has read it *i* 意 'thought', but I do not think that is right.

155. Lo, 13 b: »I have made a fine mirror, I have my own rule; a skilled master and a fine draughtsman have been in charge of the decoration; on it are ancient animals, they eliminate what is baleful; if you carry it, you will have a high age; may you be a prince or a king». Rimes *ch'ang*: *chang*: *siang*: *wang*. 向 stands for 常, 守 for 守.

156. Senoku Zoku, 116: »The Shang-fang has made the mirror, it has its own good [method]; it is bright like the sun and the moon; . . . ; they have engraved and worked the animals proper to the various parts (of the mirror) they are all there; may you long preserve your two parents; may you have grandsons and sons; may your office attain to that of one of the three dignitaries; may you have profit in the market (or: May the mirror be profitable in the market?); may you tell later generations [of yourself]». Rimes *hao* (*χōg*): *yu* (*giüg*): *yu* (*giüg*): *tsī* (*tsiəg*): *shī* (*dīg*)). 右 stands for 有.

157. Ku king t'u lu, chung 19: »Mr. Lung has made the mirror, he has his own method; [there are] Tung-wang-kung and Si-wang-mu; the Blue Dragon is to the left, the White Tiger to the right; he has engraved and worked the animals proper to the various parts (of the mirror), they are all there; great good luck!. Rimes *tao* (*d'ōg*): *mu* (*mag*): *yu* (*giüg*): *tsai* (*dz'əg*)).

158. Tomioka p. 100: »The Shang-fang has made the mirror, it has its own method; the Blue Dragon and the White Tiger . . . ».

159. Lo, 14 b: »The period Kien-ning, 2nd year, 1st month, 27th day, ping-wu, from the three auspicious [metals] I have made the bright mirror, I have my own recipe; the white alloy is pure and bright and reflects much light; may the buyer have great profit, may his house be rich and prosperous; may your ten sons and five daughters be princes (princesses) or kings (queens); may your father and mother (keep each other =) keep living together and may their life-time be long; may you live in the world and have joy without end». Rimes *fang: kuang: ch'ang: wang: ch'ang: yang: yang*.

As Lo points out (King hua 2 b), the 1st month of the 2nd year Kien-ning (169 A. D.) has no day ping-wu, and there are frequent examples of inscriptions in which an incorrect day ping-wu is indicated. The explanation is given by the Lun heng passage already quoted above (inscr. 140). Tomioka (p. 127) has already drawn attention to this passage and to the fact that it was already discussed in Kuei Fu, Cha pu (k. 8). From the symbolical and magical point of view the day ping-wu was the proper day for the casting of mirrors, some of which had the sacred task of drawing fire from Heaven; this was due to word symbolism: 火 ping means 'fire, heat', and 午 wu means 'noon' (sun at zenith). Therefore the formula: »on the day ping-wu» has been generalized and transferred also to mirrors that were not really made on a ping-wu day.

160. Tomioka p. 149: »I have made the bright mirror, I have my own recipe; the white alloy is pure and bright».

161. Lo, 12 b: »Mr. Ts'ai has made the mirror, he has his own principles; may your home have great wealth; may your seven sons and nine grandsons each of them have delight; may your office attain to that of one of the three dignitaries or a *chung-ch'ang-shi*; on it are Tung-wang-kung and Si-wang-mu; they are preserved as long as Heaven». The last clause may have a double sense and mean at the same time: »may you (like Tung-wang-kung and Si-wang-mu) be preserved as long as Heaven». In the Yi-lin by Ts'uei Huan (first decades of the 1st c. A. D., see this Bull. 4, p. 181 ff.), a work full of Han time lore, we find (k. 5, p. 6 b in the Shī li kü ts'ung shu ed.): *Jo shuei chī shang yu Si-wang-mu, sheng pu chī lao, yü T'ien siang pao* »On the river Jo (North-West of China) there is Si-wang-mu; she lives without knowing old age; she is preserved as long as Heaven». Both the last clauses occur on our mirror inscriptions. A similar inscription as our 161 is reproduced — and misread in several places — in K'i ku shī k. 15, p. 10.

162. Umehara Kinenkyō p. 3: »The period Kü-shē, 1st year; I have my own true [principles] (in making the mirror); may your house have great wealth; may

your store of rice always have a surplus from last year; . . . be an officer and be a prominent man; may husband and wife find pleasure in each other; may they every day more and more love and like each other». Rimes *chen: ch'en: jen: shan*. The lost word is probably *fu* 'to carry' or *yung* 'to use': »may the one who carries the mirror» etc.

163: Museum of Far Eastern Antiquities 11033:17: »The Imperial mirror of the Shang-fang is greatly without blemish; to the left the Dragon and to the right the Tiger eliminate what is baleful; the Red Bird and the Black Warrior conform to the yin and yang forces; may your sons and grandsons be complete in number and be in the centre; may you long preserve your two parents; may your joy and wealth be splendid; may your longevity outstrip that of metal and stone; may you be like a prince or a king; may you have oxen and sheep». Rimes *shang: siang: yang: yang: ch'ang: wang: yang*. For the translation cf. inscr. 102. The same inscription, minus the three last clauses, is given in Lo, 10 a (yet: *shang-fang tso king*) and Kin shi so 6,8 (yet *shang-fang kia king* »the good mirror of the Shang-fang»).

164. Lo, 13 b: »I have made the good mirror, it is truly without blemish; to the left the Dragon and to the right the Tiger guard the Four Quarters; the Red Bird and the Black Warrior conform to the yin and yang forces; may your sons and grandsons be prominent and rich, may they be princes and kings; may you hand it down and be renowned for ten thousand years; may you have joy without end». Rimes *shang: p'ang: yang: wang: yang*. This inscription is beautifully illustrated in Tōkwaan XIV, though it is badly misread there.

165. Tomioka p. 312: »The Imperial mirror of the Shang-fang is greatly without blemish; a skilled artisan has engraved it and achieved a decoration; to the left . . . Warrior (as 163) harmonize the yin and yang forces; may your sons . . . king (as 163)». Rimes *shang: chang: siang: yang: yang: ch'ang: wang*. This inscription occurs also in K'i ku shi 15,38.

166: Yetts, Eum. Cat. II, pl. IX: »The Imperial mirror of the Shang-fang is truly without blemish; a skilled . . . forces (as 165); may your sons and grandsons be complete in number and be in the centre; on it are Immortals such as are customary (on mirrors); may you long preserve . . . king (as 163)». Rimes *shang: chang: siang: yang: yang: ch'ang: ch'ang: wang*. Before *hou wang* a *ju* has been skipped. For the translation see 102. The phrase *chen wu shang*, correctly read by Yetts, has been misread 莫 *mo* *wu* *shang* by Umehara, Shina kokyō p. 17; this is due to the great similarity of the two characters *chen* and *mo* in the Han writing.

167. Lo, 10 b: The Shang-fang has made the mirror, it is greatly without blemish; a skilled artisan has engraved it and achieved a decoration; to the left the Dragon and to the right the Tiger manage the four sides (Quarters); the Red Bird and the Black Warrior make the yin and yang forces beneficial; may your sons . . . centre (as 166): on it are Immortals who divert themselves on high; may you long preserve your two parents; may your joy and wealth be splendid; may your longevity be like that of metal and stone; may you become a prince or a king». Rimes *shang: chang: etc. Kin shi so* 6,7 has the same inscription with the exception that instead of *shang yu sien jen kao ao siang* there is: *lien chi yin si ts'ing er ming* »I have refined and worked silver and tin; it (the mirror) is pure and bright».

168. Tomioka p. 14, pl. 5. »The Shang-fang has made . . . Tiger (as 167) eliminate what is baleful; the Red . . . Warrior rule the Four quarters; may your sons . . . splendid (as 163)». The last word *ch'ang* is unreadable.

169. Lo, 11 b: »From the yellow auspicious [metal] I have made the mirror, it is greatly» etc.

170. Tomioka p. 16: »The Shang-fang has . . . decoration (as 167); the White Tiger and the Lion are in the centre; may your longevity be like that of metal and stone; it (the mirror) is fine and good; on it are Immortals who do not know old age». Rimes *shang: chang: yang: hao: lao*. The char. 𠙴 is a correction; the inscription has really 白, which is an error due to the similarity of the two characters.

171. Lo, 13 a (repr. in Ku king t'u lu): »Mr. Lung has made the mirror, it is greatly without blemish; the New dynasty (Wang Mang) has good copper, which comes from Tan-yang; he has mixed it with [copper from] K'un-yang, it is pure and bright; he has engraved and depicted marvellous animals and achieved a decoration; the Kü-hü and the P'i-sie eliminate all noxious influences; the Lion and the T'ien-lu assemble there; may you forever have sons and grandsons; great good luck and felicity!» Rimes *shang: yang: ming (miāng): chang: hiung (xiāng): chung (tiāng): siang*. K'un-yang was a district in Han time. For 'Lion' the inscription has really 除子, but this is obviously a corruption of shi-tsī 師子; shi has a variant (introduced by me in the deciphered text) which is very similar to *ch'u*.

For the Kü-hü and the P'i-sie see inscr. 88 and 8 above. The T'ien-lu is another fabulous animal of good omen. T'ien-lu 麋 is a kia-tsie for t'ien-lu 鹿 'the heavenly deer, being at the same time a pun, the *lu* (*luk*) 'deer' bringing *lu* (*luk*) 'happiness'. The Hou Han shu (Yü fu chī k. 40, p. 7 b) says that the Empress, when going to the ancestral temple, had six animals on her hairpins, two of which

were the T'ien-lu and the P'i-sie (in this text we have the graph 鹿). And in Ling-  
ti ki of the same work (year 185 A. D., k. 8, p. 7 b) we find: »He repaired the  
Yü-t'ang-tien (Jade Hall); he cast four bronze men and four yellow bells and also  
a T'ien-lu 天鹿 and a Hia-mo (frog)». To this the T'ang commentator remarks:  
»The T'ien-lu is an animal. At this time they ordered the *ye-t'ing-lin* Pi Lan to  
cast bronze men and range them outside the Blue Dragon gate and the Black War-  
rior gate; bells were suspended in front of the Yü-t'ang-tien and the Yün-t'ai-tien  
(Cloud Terrace Hall); the T'ien-lu (heavenly deer) and the Hia-mo (frog) spat  
water outside the P'ing-men gate; now (i. e. in T'ang time) North of Nan-yang-  
hien in Teng-chou there is a memorial stone, at the sides of which there are two  
stone animals; there are engravings on their shoulders, of which one says *T'ien-lu*,  
the other says *P'i-sie*». The Shuei king *chu* says that in Han time to the East  
of the Wei-yang palace there were the T'ien-lu-ko (T'ien-lu Hall) and the K'i-lin-  
ko (Unicorn Hall) etc. The T'ien-lu-ko palace, which got its name from the aus-  
picious animal, is mentioned already by Pan Ku in his *Si tu fu* (Wen-süan k. 1,  
p. 8 a).

172. Tomioka p. 97, pl. 24: »Mr. Lung has made the mirror, it is greatly with-  
out blemish; he has selected fine bronze, it comes from Tan-yang; he has mixed  
it with silver and tin, it is pure . . . and felicity (as 171); Rimes *shang: yang* etc.  
In spite of the different decipherings, I am afraid that these two inscriptions 171  
and 172 are from one and the same mirror, and that Tomioka has read *ts'ai ts'ü*  
where Lo Chen-yü has read *Sin yu*, and Tomioka has read *yin si* where Lo has  
read *K'un-yang*. The plate (Tomioka 24) decides in favour of *ts'ai ts'ü*; as to *yin*  
*si* or *K'un-yang* the characters give no safe decision. The first one, a fancy form,  
can be just as well 艮 as 艸. The second is surely cut as 易 *yang*, not as 易, but  
then a confusion in the tracing of these two is quite common in the mirror inscrip-  
tions. And the mixing with *yin si* »silver and tin» is a frequent mirror formula,  
whereas mixing with *K'un-yang* would be a *hapax legomenon*. Cf. also 173.

173. Lagrelius collection: »The Shang-fang has made the mirror, it is  
greatly without blemish; the New dynasty has good copper, it comes from Tan-  
yang; they have refined and worked silver and tin, it is pure and bright; a skilled  
artisan has engraved it and achieved a decoration; to the left . . . a king (as 163)». Rimes  
*shang: yang* etc.

174. Kin shi so 6,24: »Mr. Chang has made the mirror, it is greatly without  
blemish; he has refined it with silver and tin, it is pure and bright; on it are heaven-  
ly animals, which touch each other; [there are] Tung-wang-fu and Si-wang-mu;

it causes your Highness to mirror yourself; may you have grandsons and sons; it is bright like the sun and the moon». Rimes *shang* (*siang*): *ming* (*miāng*); *shou* (*diōg*): *mu* (*mag*): *tsī* (*tsjag*). The missing character must be ~~tsī~~. In the innermost circular field of this mirror there are animals that fill out the space entirely (»touch each other»).

175. Lo, 11 b: »From the three auspicious [metals] I have made the mirror, it is greatly without blemish; it causes people to be rich and prominent and have joy without end».

176. Kanshikikyō p. 681: »I have made a bright mirror; secludedly I have refined the three measured [metals]; I have followed the proper methods and suitably depicted the ten thousand regions; may you have extended years and increased longevity; may your sons and grandsons be numerous and prosperous; may you have joy without end». Rimes *shang*: *kiang*: *ch'ang*: *yang*. *Kiang* means 'boundary, frontier', but *wan kiang* is equal to the *wan fang* of inser. 182 and means the »ten thousand regions» i. e. the universe; as we have seen the mirror disc is in its decoration often divided in sections corresponding to the Four Quarters and symbolizing the universe.

One of the most enigmatic expressions in the mirror inscriptions is the constantly recurring *yu lien san shang*. *Yu lien* I take to mean »I refine [the metal] secretly, in seclusion». This corresponds nicely to the frequent clause *tsī yu ki* »I have my own rules», and to 253: *yū chung* 異 i »it is different from (the crowd =) the ordinary ones». Much more dubious is the *san shang*. Kuo Mo-jo (Kin wen ts'ung k'ao p. 241) gives an explanation which is too far-fetched to deserve reproduction. Lo Chen-yü relates, with approbation, an interpretation of T. Naitō's, which connects it with the gloss of Cheng Hüan in his commentary to I-li, *Shi kuan li* (introduction) 日入三商爲昏 »three *shang* after the sun has gone down is *hun* evening». It would seem natural then to take *yu lien san shang* to mean: »I refine [the metal] secretly in the evening (darkness)». But this will certainly not do. It would be impossible then to understand the variants *er shi ts'i shang* (213), *ku chang* (211), *san yang* (204), *san kang* (196), *kung shang* (205) (to say with Lo that these are »mistakes» is a poor expedient), and there are other parallel expressions: *ho lien po huang* (210), *po lien ts'ing t'ung* (209), *yu lien san t'ung* (206) etc. which make it probable or even certain that *san shang* has something to do with *metal*. We shall, I believe, have to examine the *san shang* expression in the I-li commentary (which is duly recorded in Pei wen yün fu and even in Couvreur's dictionary) more closely. To the sentence: »Three *shang* after the sun has gone down is *hun*

evening» Kia Kung-yen (T'ang time) in his Cheng-i remarks that *shang* is equal to 刻 *k'o*, the »cuttings» i. e. division marks of the clepsydra, which Huei Tung confirms by a parallel passage in the K'ao ling yo of Han time. Hu P'ei-huei in his I-li cheng-i adduces further ancient examples of the *k'o* of the clepsydra being called *shang*. Both Kia Kung-yen and Hu P'ei-huei explain it by the sense of 商 量 *shang-liang* 'to measure, to calculate', and Yüan Yüan (ap. Hu P'ei-huei) paraphrases *san shang* thus: *jì ju hou, ki k'o lou chī shu shang suan chī san ts'i* »After sunset one reckons the number of the marks of the clepsydra and 商 算 *shang suan* counts unto three times». *San shang* thus undoubtedly means 'three countings, three measures'. This can very nicely be applied to our mirror expression. *Yu lien san shang* can mean: »I secretly refine the three (measures of metal =) measured metals». Which these were is not dubious; they were copper, tin and lead.<sup>1)</sup> Cf. the *san t'ung* in inscr. 206. This explanation would do also for the variant *kiu lien er shī ts'i shang* »9 times I refine 27 measures of metal», i. e. I repeat my refining process 9 times (making 9 mirrors?) and for this use  $9 \times 3 = 27$  metal doses. And yet I do not think that this explanation alone suffices to elucidate our problem. The phrase *san shang* is more pregnant with meaning than that. Already Yü T'ung-po quoted by Lo Chen-yü (Ku king t'u lu p. 3) has drawn attention to the fact that the five fundamental musical notes *kung*, *shang* etc. correspond in the ancient Chinese world conception to the five elements: *kung* corresponds to earth, *shang* to metal. So *san shang* means *san kin* 'three metals'. To my mind there can be no doubt that this is fundamentally correct and quite important. It is true that there seem to be no examples in general ancient literature of the single word *shang* being used in the sense of 'metal'; but it must be remembered that just the mirror decorations and mirror inscriptions are imbued with taoistic and general mystical symbolism, astronomical, cosmological and numerical (cf. Yetts Eum. Cat. II),<sup>2)</sup> and it would therefore be perfectly in keeping with their general tenor if »three metals» were expressed by »three items of the *shang* element».

<sup>1)</sup> See Umehara, L'Analyse chimique des bronzes anciens de la Chine, p. 258. When some inscriptions say: »I mix silver and tin (inscr. 173), this seems not to be confirmed by the chemical analysis, which generally indicates copper, tin and lead as the »three measured [metals]».

<sup>2)</sup> These symbolical ideas, which made the tones the fundament of everything, were very current in Han time; cf. the introductory words in the chapter Lü shu of Si-ma Ts'ien (Shi ki k. 25), Chavannes M. H. III, p. 293: »Pour ce qui est de la détermination des affaires et de l'institution des lois par les rois, et quant à ce qui concerne les règles et les normes des êtres et des mesures, tout cela reçoit son principe des six tuyaux sonores; les six tuyaux sonores sont la tige première de toutes choses».

This would seem to be, then, a totally different sense from the »three measures» given just now. And yet that is not so. There are close ties between the two explanations, and in reality they form but one. If we go to the chapter Lü li chī of the Ts'ien Han shu (k. 21), we first find it stated that: *jo hie chī wu hing, tse kio wei mu, shang wei kin, chī wei huo, yü wei shuei, kung wei t'u* »if we put them (the notes) in relation to the five elements, then *kio* is *mu* wood, 商 *shang* is 金 *kin* metal, *chī* is *huo* fire, *yü* is *shuei* water and *kung* is *t'u* earth». And then the same chapter has some highly interesting attempts at etymology of the tone names: 角 *kio* means 獨 *ch'o* 'to knock against'; 宮 *kung* means 中 *chung* 'to be in the centre'; and *shang* is analysed thus: *shang chī wei yen chang ye, wu ch'eng shu, k'o chang to* »商 *shang* that means 量 *chang* 'to measure'; when the things (of the universe) are full-grown, they can be 量度 *chang-to* 'measured'». That 量 *chang* here has the sense of 'to measure' follows not only from the following to (the commentators specially point out that this character here has to be read *to* in its sense of 'to measure'), but also from a parallel passage in the Han ki, where it is said: *shang chē liang ye, wu sheng er k'o liang-to* »商 *shang* means 量 *liang* 'to measure'; when the things are fully developed, they can 量度 be measured». Here we are back again at the explanation of *shang* as *liang* 'to measure'. If thus the note *shang* was felt by the cosmological speculators to mean »the measure note», its corresponding element *metal* was the *shang* element, »the measure element», and the expression *yu lien san shang* »I secretly refine the three measured things» (as interpreted above) gave a wider association of ideas: the three items of the *shang* »measure element», metal. That it is this set of ideas that is inherent in the *shang* of *san shang* is shown by the variants of the phrase in the inscriptions: *wu lien* 九量 *kiu chang* »five times I have refined nine measures» (inscr. 211) — the very same *chang* 'measure' by which the Ts'ien Han shu expounds the 商 *shang* name of the fundamental note; *yu lien kung shang* (inscr. 205) »I secretly refine the *kung* element (earth — eliminating the dregs) and the *shang* element (metal)».

To sum up: On the basis of the fundamental sense of 'measure' of the word *shang*, the expression *san shang* means at the same time 'the three measured things (metals)' and 'the three items of the measure element (metal)'. In either case it refers to the metal, and forms a strict parallel to the various cases in which the metal is referred to by other names: *cheng t'ung, ts'ing t'ung, san t'ung, po huang* etc.<sup>1)</sup>

1) It might be possible, grammatically, to take *shang* as a verb: »I secludedly refine and thrice measure». But the parallels above: *cheng t'ung, san t'ung* etc. (nouns) decide against this interpretation.

And here we are once more brought up against the expression 三羊. In my opinion it is not at all necessary to consider 羊 as a kia tsie for 商, on the contrary, it gives a very satisfactory sense in its regular rôle in the mirror inscriptions of a graph for 三羊 *siang*. The *san siang* then means »the three auspicious [metals]«. Cf. inscr. 120.

177. Tōinro pl. 23: »I have made the bright mirror, secludedly I have refined the three measured [metals]; I have suitably depicted the ten thousand regions; I have followed all the proper norms and orderly principles, and respectfully present [the mirror] to wise and good men; all round I have engraved it without . . . ; may all persons forever have joy, may in all matters the yang force preponderate (may there be good luck); may your happiness and prosperity be perfect and bright; may you have wealth and prominence and peace and joy; may you have increased longevity and extended years; may you be a prince or a king and forever rich; may your sons and grandsons be numerous and prosperous; may the wise man (i. e. the owner of this mirror) be high and illustrious; may his office attain to that of a dignitary or a minister; may its (the mirror's) master (maker) be long-lived«. Rimes *shang*: *kiang*: *liang*: *yang*: *ming* (*mičng*): *ch'ang*: *k'ing* (*k'ičng*): *ch'ang*.

There are several intricate questions connected with this and similar inscriptions. The first concerns the phrase *t'ung té sü tao*. In the Tōinro pl. 23, our inscription here, it is deciphered 聰從序道, and this goes back to Tomioka (p. 24, 29). His interpretation is due to the fact that the first two characters often have a somewhat curious form (Tomioka pl. 1: 5; a very similar character shape on the Hallwyl mirror, 182 below), but it is decidedly wrong. The phrase and the connection is identical on all these mirrors, and either all have *t'ung té sü tao*, or all have *king ts'ung sü tao*. Now, on Tōinro pl. 23 the *t'ung té* is quite clear and certain; on Tōinro pl. 24 *t'ung té* is equally quite certain — indeed 聰 *t'ung* has its perfectly regular *k'ie shu* form. In Umehara Kankyo p. 180, pl. 48 the *t'ung té* is also certain (though he transcribes *king*). So we have to eliminate entirely the readings *king* and *ts'ung* and always adopt *t'ung* and *té*.

Secondly there is the 周 *chou* in *chou k'o*. The fact that we have 錄刻 in 178 and 調 in 180, 彫文刻鏤 in 198, 彫鏤文章 in 199, makes it very tempting to consider 周 as a short-form for 彫 *tiao* 'to carve, engrave', synonymous with the following *k'o*. If I do not take this for granted but translate it 'all round', it is for two reasons. In the first place the inscr. 186 as deciphered by Lo chen-yü has 州刻無亟, where 州 is a kia tsie for 周 and indicates the reading *chou* also for the latter; this, however, is not an absolutely safe *point d'appui*, since the

reading 𠀤 may be doubtful (see 186). In the second place 周 *chou* as such gives a perfectly good and natural sense: »all round», all over the disc of the mirror; it should be observed that when a mirror is divided, in its decoration, in concentric circles or zones, the technical term for such a division in the Chinese works on mirrors is this very 周 'circle, circular band'. Since this is so, I dare not lightly consider *chou*, which is quite acceptable in itself, as a kia tsie for *tiao*.

In the third place there are the enigmatic words following *chou k'o*. They have been read in the most varying ways. Ch'en King, in his *K'iu ku tsing shê kin shî t'u* gives our inscr. 182 and transcribes 冊 祀. Gotô in his *Kanshikikyô* p. 137 reads 典 祀, and so does Tomioka p. 24, and Umehara *Kankyo* p. 188. Nakayama (*Kôkogaku zasshi* vol. 10, p. 360) reads 冊 祀, Tomioka p. 60 (our inscr. 180) reads 冊 祀 (with an interrogation mark for the 2nd character), and so does Umehara in *Tôkwaan* pl. 30 (without interrogation mark). Umehara in *Tôinro* pl. 23 and 24 (our inscr. 177 and 178) reads 典 祀, and so does Senoku *Seishô* 109. Lo Chen-yü has the phrase in his *Ku king t'u lu, chung* p. 24, but he has read (King lu 13 b) only *chou k'o* 無 *wu* ○, leaving the last character undeciphered. Here again it is clear that it is a question of one and the same formula, identical in all these various mirrors; the riddle is how to read it.

I have seen five mirrors or reproductions on which the two words are clearly visible:

- a) *Tôkwaan* pl. XXX (same as Tomioka pl. 10: 1, our inscr. 180);
- b) Lo Chen-yü, *Ku king t'u lu, chung*, p. 24;
- c) Hallwyl Collection, L. 16 (our inscr. 181);
- d) A mirror in Sammlung Oeder, Priemern, Altmark (Photo in *Mus. of Far E. Ant. Stockholm*);
- e) Ch'en Kie-k'i, *Fu chai ts'ang king* (1925), shang p. 27 (the reproductions in this book are extremely poor, so generally it is of no use whatever; by a lucky chance, however, this inscription phrase comes out quite clearly).

There are two more on which the first character is clearly visible:

- f) *Tôinro* pl. 24;
- g) *K'iu ku tsing she kin shî t'u* (our inscr. 182).

Now, on c. d. e. f. the first character is an unmistakable 無; indeed it is the ordinary perfectly regular Han time graph, which occurs in other contexts on scores of mirrors. On a., b. and g. it is varied by drawing the vertical lines higher than usual and letting them coalesce with the four dots of the *wu*. But this variation is nothing very peculiar. The mirror graphs are very often much more disfigured

than that. The first character therefore is decidedly 無 *wu*, and we should eliminate entirely the *ts'ē* and *tien* proposed earlier.

The second character is written 積 in a. 積 in c. and e. 積 in b; and 積 in d. There can be no doubt about the radical 113 示, but for the rest the character is absolutely baffling. It is impossible to accept the *st*, the *chu*, the *shé* or the *ch'i* proposed earlier (see above). The last one (inscr. d) has a clear and unmistakable 已 *i* 'to end', and we might think of a 無 已 *wu i* (»all round I have engraved it unendingly» i. e. very richly), an expression which occurs e. g. in 124 *lo wu i* 'joy without end'; 已 would then have a superfetation radical 示, just as 保 often has an extra rad. 140 at the top (see e. g. inscr. 96), which is quite meaningless. But a. b. c. and e. cannot be 已. Are they fancy variations of the 積 (極) which we meet constantly in the expression *wu ki* 'unlimitedly' (synonymous in such a case with the possible 無 已 of d. — just as we have *lo wu i* 'joy without end' in 124 and *lo wu ki* 'joy without limit' in 131)? We find that phrase in just this kind of expressions: 210: 自 刻 無 積; 186: 州 (= 周) 刻 無 積 (if this is correctly read by Lo). There is, indeed, no possibility of arriving at a definite answer before future publications have given us more complete materials. We had better follow Lo and leave the last character a blank.

A fourth difficulty concerns the final line. It is read 與 師 命 長 by Umehara, which can make sense and mean: »May you together with the mirror's maker be long-lived». But in the pl. 23 I imagine that I can clearly read a 其 *k'i* instead of *yü*. It is the same with inscr. 178, in which Tōinro pl. 24 distinctly shows a *k'i*. Indeed, the ancient forms of *k'i* are often very similar to *yü*, and I have come across no inscription with this formula in which I do not think the reading *k'i* preferable.

178. Tōinro pl. 24: »I have made . . . metals (as 177); I have engraved it without . . . and suitably . . . good men (as 177); may all persons have joy, may all divinities show their apparitions; may your hundred life-essences . . . ; may your happiness and prosperity last forever; I wish that you would constantly carry it (the mirror); may your wealth and prominence be ample and splendid; may you forever obtain what you love; may its (the mirror's) master (maker) be long-lived». Rimes *shang*: *kiang*: *liang*: *jung* (*djung*): *ch'ang*: *ch'ang*; *kiu* (*kjüg*): *chi* (*tjøg*). *Po shen* *kü lo* — *kü* means 'all'. The fifth character from the end Umehara has deciphered as 積; I read it *huan*. For my *wu* ○ instead of Umehara's *tien* *st* see inscr. 177 above.

179. Umehara Kankyo p. 188: »I have made . . . good men (as 177); I have

suitably engraved it without . . . ; may all persons have joy; may in all matters . . . and joy (as 177); may your sons and grandsons be numerous and prosperous; . . . may your office attain . . . long-lived (as 177)». Rimes *shang: kiang: liang: yang ming: ch'ang: k'ing: ch'ang*. I have translated as if the phrase were 福祿正明 as in 177, since Umebara's 身 gives no sense, and altered his *tien chu* into *wu* ○ cf. 177 above. In the last clause Umebara reads 見 *kien shi ming ch'ang* — I am convinced that 見 should be 其 (there are ancient variants of these two which are very similar).

180. Tomioka p. 60, pl. 10 (= Tōkwaan pl. XXX): »Mr. Liu has made the bright mirror; secludedly he has refined the three measured [metals]; he has . . ., and suitably depicted the ten thousand regions; the Heavenly Birds and the Four Animals maintain the proper rules; great good luck; may its (the mirror's) master be long-lived; the one who carries . . .; respectfully I present it to wise and good men; may you have extended years and increased longevity; wealth and prominence . . . » Rimes *shang: kiang: kang: ch'ang: liang*. I have altered Tomioka's *ts'ē ch'i* into *wu* ○, cf. 177 above. 𩫑 is kia tsie for 漏, and *wei-kang* means 法度 'rules' (see e. g. Ueda, Daijiten). After *fu-ché* two words must have been skipped. The verse is broken off.

181. Hallwyl L, 16: »Mr. Yüan had made . . . metals (as 180); . . . regions; he has followed all the proper norms and orderly principles, and engraved it without . . .; may all . . . good luck (as 177); may its master be long-lived». 克 is kia tsie for the homophonous 刻.

182. K'iu ku tsing she kin shi t'u: »I have made . . . metals (as 177); all round I have engraved it without . . ., and suitably depicted the ten thousand regions; the Four Airs (airs of the four seasons) follow the norm of the Primeval Beginning; the Six Points (N. S. E. W. Heaven and Earth, i. e. N. S. E. W. zenith and nadir) are established . . .». Rimes *shang: fang: chang*. I have corrected Ch'en's *ts'ē sū* into *wu* ○, see 177 above. The last clause refers to the symbolism by which the parts of the mirror correspond to the Four Quarters and the Quadrant of Heaven, the Four Seasons etc. Cf. inscr. 145.

183. Kin shi so 6,13: »I have myself made the bright mirror, secludedly I have refined the three measured [metals]; all round I have engraved the ten thousand regions; the Four Tigers (?) depict the Primeval Beginning, the Six Points are established; may your own person have joy and all your followers have peace; great good luck and felicity; may its master (maker) be long-lived». The reproduction is not a true rubbing, but have been characters are deciphered and drawn

by the author. I am convinced that the »Four Tigers» is a misreading for *sī k'i* the »Four Airs» as in 182. 白 *tsī shēn lo* might be a mistake for 百 *po shēn lo*, as in 182, but I am not sure: the antithesis with the following line might support the reading. Feng writes 與 *yù shī ming ch'ang*, which I have emended into 其 *k'i shī ming ch'ang*, cf. 177.

184. Umebara Kankyo p. 185, pl. 48: »Mr. Tsē has made . . . metals (as 180); he has followed all the proper norms and orderly principles and suitably depicted the ten thousand regions; may you have extended years and increased longevity; may your wealth and prominence be ample and splendid; may you achieve merit and your actions be conspicuous; may the master be long-lived». Rimes *shang: kiang* etc. Lo, 13 a, has the same inscription with a few gaps. If it were not that the 見 is so absolutely clear on the plate, one might suspect that the word should be read 其 *k'i* and carried to the last clause *k'i shī ming ch'ang*.

185. Umebara Kinenkyō p. 5: »The period Yüan-hing, 1st year, 5th month, the day ping-wu, Heaven (= the Emperor) made a great amnesty; from metal from Kuang-Han I have made the bright Shang-fang mirror, secludedly I have refined the three measured [metals]; all round I have . . . unlimitedly; May you for generations obtain splendour; may you forever have joy without end; may you be rich and prosperous; may you become a prince or a king; may the master (maker) be long-lived; may you live like (as long as) stone; may your official position attain to that of one of the three dignitaries; may your longevity be like that of Tung-wang-kung and Si-wang-mu and the Immortals; may your son's official position attain to that of a dignitary or a prince». Rimes *shang: ming: yang: ch'ang: wang: ch'ang*. I have left the line »all round . . . unlimitedly» incompletely translated, for it seems very doubtful how it has to be deciphered. Umebara reads 周得無極 which gives no sense — he gives no plate so I cannot verify the reading; exactly the same inscription is recorded by Lo Chen-yü (p. 14 b) and he reads 周○無亟 leaving the second character blank. Again, Tomioka p. 129, pl. 29: 1 reads 周得無敝 which, if correct (the plate is unreadable), would mean: »All round I achieve [the decoration] without blemish». In the first line, where Tomioka and Umebara have read *T'ien ta shé* »the Emperor made a great amnesty», Lo writes ○大利, which seems less plausible. There are several periods Yüan-hing, and Tomioka (p. 130) gives good reasons for believing that our inscription refers to A. D. 105.

186. Lo, 15 a: »The period Hi-p'ing, 2nd year, 1st month, the day ping-wu, I have made the bright . . . metals (as 185); all round I have engraved it (unlimi-

tedly =) very richly; may you for generations obtain splendour; may the buyer obtain great wealth and prominence; may you forever have sons and grandsons and extended years». **州** *chou*, if correctly read, is a kia tsie for the homophonous **周** *chou*. There is, however, some uncertainty. Tomioka, p. 149, pl. 29: 2, has the same inscription, but instead of **州刻** *wu ki* he reads **世祿** *wu ki* »may you for generations have (emoluments =) prosperity without limit». The plate does not enable us to decide between the two readings. Umehara Kinenshō 10 has the same decipherment as Lo, so probably this is right. The **世得光明** of Lo's, Tomioka reads **中得** *kuang ming*, but this is decidedly wrong. The date refers to A. D. 173.

187. Lo, 17 a: »The period Yung-k'ang, 1st year, 1st month, the day ping-wu, I have secludedly refined the three measured [metals]; I have made the bright Shang-fang mirror; may the buyer have great wealth and prosperity; may you forever have sons and grandsons; may you have . . . longevity, and may your life be long; on it are Tung-wang-fu and Si-wang-mu; may your Highness have a high office; may your official position attain to that of a dignitary or a prince; great good luck and benefit». Tomioka p. 131 has the same inscription, though he has misread **如** for **則**. Tomioka's pl. 28 and the clear plate Tōkwaan XXVII support Lo's reading. **早** is a kia tsie for **造**. The date may refer either to A. D. 167 or A. D. 300. Tomioka, p. 131, decides in favour of the former.

188. Tomioka, p. 173, pl. 37: »The period Yung-an, 4th year, the great year ki-si, 5th month, 15th day, keng-wu, I have made the bright mirror; secludedly I have refined the three measured [metals]; above it corresponds to the various Mansions, below it eliminates what is baleful; may the one who carries it have a high office; may your official position attain to that of one of the three dignitaries; may your daughter have a husband, may your sons and grandsons fill your hall . . . ; . . . (block =) fill the road; your six kinds of domestic animals . . . ; may you have joy without . . . ». Rimes *shang: siang: kung: t'ang: shang(?)*.

The »various Mansions» are the 28 *siu* »Mansions», constellation groups, of the firmament. Tomioka's reading **亦宜遮道** gives no sense. The plate clearly shows the first word to be **巾** *kin*, and the right half of the second to be **百**. Is the character **巾百**? **潘傷** gives no sense either, and must be a kia tsie. Does it mean the common expression **播揚** 'to spread about'? Does the sentence run thus: *kin mo chē tao, liu ch'u po yang* »may the head towels and turbans crowd the road (may there be many people in your house, children, servants, clients), may your six kinds of domestic animals (be spread about =) be numerous»?

The reading is indeed very uncertain. Tomioka (p. 173) in a lengthy discussion maintains that the year must be A. D. 261 (misprint: 262) (kingdom of Wu, King-ti), in spite of the fact that the year was not a *ki-si* year, nor was the 15th day of the 5th moon a *keng-wu* day. The question is very obscure.

189. Umehara, *Kinenkyō* p. 17: »The period *Yen-k'ang*, 1st year, 10th month, 3rd day, I have made the bright . . . metals (as 188); may the buyer be . . . prominent and rich, and receive high promotion to be one of the three dignitaries, the nine ministers, the twelve great officers; good luck!». The year is A. D. 220.

190. Lo, 16 b: »The period *T'ai-k'ang*, 2nd year, 3rd month, 3rd day, in the middle of the day, I have thrice worked and four times skilfully manipulated and secludedly refined the three measured [metals]; the three dignitaries, the nine ministers and the twelve . . .».

The translation »thrice worked and four times skilfully manipulated» is tentative and very uncertain; all the more so as the deciphering seems to be disputable. Umehara *Kinenkyō* 42 reads 三工立巧. The year is A. D. 281.

191. Tomioka p. 54, pl. 28: »I have made . . . metals (as 188); may your Highness be a prince or a king». Rimes *shang: wang*.

192. Senoku 21: »I have made the bright mirror; secludedly I have refined . . .; all round I have engraved it auspiciously».

193. Umehara, *Shigaku* vol. 11, p. 465: »The period *T'ai-k'ang*, 4th year, 1st month, 28th day, I have made the pure mirror; secludedly . . . metals (as 190); [there are] the Blue Dragon and the White Tiger, Tung-wang-kung and Si-wang-mu; may you be rich and prominent generation after generation; may you have good luck and benefit and great peace». The year is A. D. 283.

194. Umehara, *Shigaku*, vol. 11, p. 465: »The period *T'ai-k'ang*, 3rd year, 2nd month, 20th day, I have made the mirror, secludedly I have refined the three measured [metals]; the barbarians of the four directions have submitted; much I congratulate the country; the people have got rest; the *Hu* slaves are destroyed and exterminated, the Empire is restored; wind and rain are timely and temperate, the five kinds of grain ripen; great peace and joy forever». The year is A. D. 282. For rimes see *inser. 123 ff.*

195. Umehara *Kinenkyō* p. 43: »The period *T'ai-k'ang*, 3rd year, 6th month, 30th day, I have made the bright mirror, secludedly I have refined the three measured [metals]; the barbarians of the four directions have voluntarily submitted; much I congratulate the country; the people have got peace and rest; the *Hu* slaves are destroyed and exterminated, timely rains are responding and temperate;

the five grains grow richly and ripen; the Empire is restored». *Ying* 'responding' means that when man does his duty, Heaven responds by giving suitable weather. The year is A. D. 282.

196. Lo, 13 b: »I have made the bright mirror, secludedly I have refined the three hard ones (metals); suitably I have depicted the ten thousand regions, and respectfully I present it to wise and good men; all round I have engraved it without . . .; all . . . are dominated by the yang force . . . are lucky, (see inscr. 177); may your sage virtue be splendid, may your sons and grandsons be numerous and prosperous; may the one who carries [the mirror] have great good luck; may you live like (as long as) the mountain and not know old age; may the master (maker) be long-lived». Rimes *kang: kiang: liang: yang: ch'ang: ch'ang*.

197. Tomioka p. 67, pl. 13: »I have . . . hard ones (as 196); a skilled artisan has engraved it and achieved a decoration; on it are the Four Animals which eliminate what is baleful; may you have the highest happiness and prosperity . . . great wealth; may you have oxen and sheep; may you be an officer and rise high». Rimes *kang: chang: siang: yang*. In *p'i pu siang* the *pu* has been skipped. The same inscr. in Tōkwaan XXIV.

198. Tomioka p. 25, pl. 2: »I have new-made the bright mirror, secludedly I have regulated the three hard ones (metals); the copper comes from Sü-chou, the master (maker) comes from Lo-yang; I have decorated and engraved it and all over it made a decoration; in its quality it befits a superior man; it is pure and bright; to the left there is the Dragon and to the right the Tiger; may you hand it down in the world and have fame; the Lion and the P'i-sie assemble, and play together with Wang-fu (Tung-wang-fu) and Wang-mu (Si-wang-mu); I have heard . . .; may you have sons and grandsons». Rimes *kang: yang: chang: ming: ming*.

199. Kanshikikyō p. 405: »I have made the bright mirror, secludedly I have regulated the three hard ones (metals); the copper comes from Sü-chou; I have engraved its decoration; in its quality . . . fame (as 198); may the one who holds it (the mirror) have great good luck; may you preserve your sons and may you have grandsons». For rimes see the preceding.

200. Kanshikikyō p. 359: »I have new-made . . . hard ones (as 198); in its quality . . . bright (as 198); the copper . . . Lo-yang (as 198); I have decorated . . . decoration (as 198); may the one who holds it (the mirror) have . . . good luck; may you have sons and grandsons». Gotō writes 所者, which gives no sense; I have guessed that it should be 取者, as in 199.

201. Umehara Kankyo p. 189: »I have made the bright mirror; may you have

the king's days and months; secludedly I have refined the three hard ones (metals); I have followed all the proper norms and orderly principles and suitably depicted the ten thousand regions; may you have the king's days and months; respectfully I present it to wise and good men; may you have the king's days and months; may you have extended years and increased longevity, may your sons and grandsons be numerous and prosperous; may you have the king's days and months; may you be as unlimited as Heaven; may you have the king's days and months; may its (the mirror's) master (maker) be long-lived». Rimes *kang* etc. 京 (*kiāng*) is a kia tsie for 顯. I have corrected Umehara's 見 in the last line into 其.

202. Lagrelius Collection: »May you have the king's days and months; I have made the bright mirror, secludedly I have refined the three hard ones».

203. Tomioka p. 113, pl. *ibid.*: »I have made the bright mirror; secludedly I have refined the three auspicious [metals]; may you have the king's days and months; may your official position attain to that of one of the three dignitaries». Rimes *siang*: *kung*. P. 56 Tomioka gives a line of the same inscription as *ji yüe t'ien wang*, which is a mistake, as shown by the plate.

204. Lo, 15 a: »The period Chung-p'ing, 6th year, 1st month, the day ping-wu, I have made the bright mirror; secludedly I have refined the three auspicious [metals]; I have my own method; it eliminates what is baleful; [there are] Tung-wang-kung, Si-wang-mu, Immortals, Jade girls (fairies), Tao adepts; if an officer buys the mirror, may his position attain to that of one of the three dignitaries; if a merchant buys the mirror, may a hundredfold profit revert to his house; great good luck; may you have Heaven's days and months». The year is A. D. 189. Tao-chang 'Tao adepts', properly 'superiors in the Tao', the true principles, cf. Hou Han shu, Fu Tan chuan: *k'i po ché pu kin yung, tao chang ché k'i yung yüan* »Those who have great capacity are not used for (near =) small tasks; those who are superior in the Tao, the true principles, are used for far-reaching tasks».

205. Lo, 15 b: »I have made the bright mirror, secludedly I have refined the *kung* element (earth) and the *shang* element (»measure« element, metal) all round I have distributed the apparitions; there are the Five Emperors and the Heavenly Emperor; Po Ya plays the lute, Huang-ti eliminates what is noxious; there are the Red Bird and the Black Warrior, the White Tiger and the Blue Dragon; may your Highness have high office; may your sons and grandsons be numerous and prosperous; made in the period Yen-an, 10th year; great good luck». Rimes *siang*: *huang*: *hiung*: *lung*: *ch'ang*. For the *kung* element and the *shang* element see inscr. 176. It might seem curious to »refine« the *earth* element, but the mean-

ing is the same as in inscr. 144: *k'ü hia t'u* »to eliminate the base earth», i. e. the dregs. Cf. also inscr. 245. As the »Five Emperors» are reckoned either (Li ki) T'ai-hao, Shen-nung, Huang-ti, Shao-hao and Chuan-hü; or (Ta Tai li) Huang-ti, Chuan-hü, Ti K'u, Yao and Shun (cf. Chavannes M. H. vol. I, p. 25 ff.). For the Heavenly Emperor see P. Pelliot, this Bulletin 4, p. 115. About Po Ya, a famous lute player from Ch'u in Ch'un-ts'iu time, the *Lü shi ch'un ts'iu* (chapter Hiao hing lan) narrates: Po Ya played on the lute, and Chung Ts'i-k'i listened. When he first played, his mind dwelt on Mount T'ai-shan. Chung Ts'i-k'i said: Well indeed do you play the lute, it is majestic like the T'ai-shan. After a while his (the player's) mind dwelt on flowing water. Chung Ts'i-k'i said: Well indeed do you play the lute. It is surging like flowing water. When Chung Ts'i-k'i died, Po Ya broke his lute and cut off its strings and never more in his life played a lute; he considered that there was nobody in the world good enough (listener) to be played to». The year of the inscription is A. D. 205. A very similar inscr. To-mioka p. 62, pl. 11.

206. *T'u shu ts'i ch'eng* k. 225, p. 22 a: »I have made the bright mirror, secludedly I have refined the three metals».

207. *Lo*, 16 a: »The period T'ai-p'ing, 1st year, I have made the bright mirror, a hundred times I have refined the genuine copper; may the one who mirrors himself become very old, may the one who has made it live long; may you become a dignitary or a minister; may you have joy without end». Rimes *t'ung* (*d'ung*): *sheng* (*sëng*): *k'ing* (*k'jang*): *yang* (*yang*). There are several periods T'ai-p'ing. The same inscription slightly abbreviated and dated Yung-an 6th year (263 A. D.), 1st month, 7th day, is found in Umehara Kankyo, p. 78.

208. *Lo*, 16 b: »The period Yüan-k'ang, 1st year, I have made . . . live long (as 207); may your house have five horses». The year is A. D. 291.

209. Umehara Kinenkyo p. 22: »The period Ch'i-wu, 1st year, 5th month, 20th day, I have made . . . ; a hundred times I have refined the pure copper; may the one who carries it become a prince; may you forever have joy without . . . ; my master in the past was named Chou-kung. Rimes *t'ung*: *x: kung*. Here again is one of the comparatively rare specimens with Confucian allusions, cf. inscr. 146 above. The year is A. D. 238.

210. *Lo*, 15 a: »The period Hi-p'ing, 3rd year, 1st month, the day ping-wu, I have made a bright Shang-fang mirror; from Kuang-Han and Shu in the West I have mixed and refined the white and yellow [metal]; myself I have engraved it (unlimitedly =) very richly; may you for generations obtain splendour; may

the buyer have great wealth; may you forever have sons and grandsons; may you have extended years and increased longevity; may you forever have joy without end». **受** is kia tsie for **𠙴**. The year is A. D. 174. The mirror is reproduced in Lo's Ku king t'u lu, and there can be no doubt that the line *tsi k'o wu ki* is read correctly — cf. also the very similar inscr. 186 above. Yet Tomioka has reproduced (p. 65) the inscription after the Ku king t'u lu and read **○利無極**. He may have been influenced by Liu Sin-yüan, who in his *K'i ku shi ki kin wen shu k.* 15, p. 7 gives exactly the same inscription but with the line in question running: **自利無敵** »may your own profit be unlimited». In the rubbing in that work the *tsi li* are unmistakable.

211. Tomioka p. 58: »The period Kien-hing 2nd year, 9th month, 2nd day, I have made the bright mirror, five times I have refined nine measures [of metal]». The year is either A. D. 224 or A. D. 253.

212. Tomioka p. 59: »The period T'ai-p'ing, 1st year, 5th month, the day ping-wu, I have made a bright mirror, a hundred times I have refined . . . measures; may the one who carries it live long . . .» Rimes *chang: sheng* (*sēng*). The year is A. D. 256.

213. Lo, 16 a: »The period T'ien-ki, 2nd year, 7th month, 7th day, in the middle of the day, I have nine times refined the twentyseven measures [of metal] . . . may the magistrate [who carries this mirror] when being in office be highly promoted, may his official position attain to that of one of the three dignitaries . . . extended years». The year is A. D. 278. For »nine times refined the twentyseven measures» see inscr. 176 above. **患** is a kia tsie for **宦**.

214. Tomioka p. 117. »The period Huang-lung, 1st year, the great year being ki-yu, 9th month, jen-tsi, 13th day, kia tsie, the master Ch'en Shi has made and thrice refined the bright mirror; may the one who carries it for ever be rich and prominent». The year is A. D. 229.

215. Lo, 10 a: »The Shang-fang has made the mirror, it is truly very good; on it are Immortals who do not know ageing; when thirsty they drink from the jade springs, when hungry they eat dates; they roam about in the whole world and ramble [everywhere between] the four seas; may your longevity be like [that of] metal and stone; may you be a protector of the country». Rimes *hao* (*χōg*): *lao* (*lōg*): *tsao* (*tsōg*): *hai* (*χməg*): *pao* (*pōg*). Same inscr. Tomioka pl. 8. Umehara Kan-kyō p. 11 has an inscr. with plate which has the same reading with two variations: *tso kia king tsai* »I have made a good mirror» and *shou ju yü shi* »may your longevity be like [that of] jade and stone». In our inscription it may seem question-

able suddenly to change the subject and translate: »may *your* longevity be» etc.; grammatically it would be just as good to continue with the immortals as subject: *their* longevity is like etc. But parallels in other inscriptions show that the immortals are finished with, and the inscription winds up with a well-wishing expression, see e. g. 218 below.

216. Seligman Collection (photo in Mus. of Far East. Antiq.): »The Shang-fang . . . four seas (as 215); they rove among the renowned mountains and gather divine herbs; may your longevity be like [that of] metal and stone; may Heaven protect you». Rimes as 215 with the add. of *ts'ao* (*ts'ôg*).

217. Lo, 9 b: »The Shang-fang . . . dates (as 215); they rove among the divine mountains and gather their herbs; may your longevity outstrip [that of] metal and stone and [that of] Si-wang-mu». Rimes *hao* (*χôg*): *lao* (*lôg*): *tsao* (*tsôg*): *ts'ao* (*ts'ôg*): *mu* (*môg*).

218. Umebara Kankyo p. 160: »The Shang-fang . . . dates (as 215); may your sons and grandsons be complete in number and forever (preserve each other =) live together». Rimes as 216.

219. Tomioka p. 27, pl. 2: »I have made a bright mirror, it is truly very good; they [the Immortals] roam about in the whole world and . . . [everywhere between] the four seas; I have used green copper, it goes to the East of the Sea». Rimes *hao* (*χôg*): *hai* (*χmôg*); *t'ung*: *tung*. The last line conveys the idea that the mirror is to be sent as a gift to Japan.

220. K'i ku shi k. 15, p. 20: »The Shang-fang has made the mirror, it is truly very good; on it are Immortals who forever do not become old . . . ». (A slight variation in the wording which is not very common).

221. Umebara Kankyo p. 120: »Mr. Wu has made the mirror, it is truly very good; on it are Immortals who do not know ageing; may you have a thousand autumns and ten thousand years; may you forever preserve your two parents; may felicity arrive [come to you]». Umebara transcribes erroneously *mo ta hao* instead of *chen ta hao*, cf. inscr. 166 above.

222. Kanshikikyo p. 115 and 453: »I have made the bright mirror, it is exceedingly good; on it are divine animals and Dragon and Tiger; on their bodies they have designs, and their mouths hold hooks (? rings ?); anciently there were the sages Tung-wang-fu and Si-wang-mu; when thirsty they drank from the jade springs; may you have five sons and two daughters». Gotô means that *kü* stands for 金鉢, which again would be equal to 金鉢.

223. Tomioka, 262, pl. 4: »Of [metal from] T'ai-shan I have made the mirror,

it is truly very skilfully made; on it are Immortals who do not know ageing; they rove among divine mountains and gather the *chi* herb (an auspicious plant); when thirsty . . . seas (as 215); may you have joy without end». Rimes *k'iao* etc. The same inscription in Tōkwaan XV, yet *chi* is without rad. 140 (short-form), and *pao* has an additional rad. 140.

224. Tomioka p. 213: »Mr. Shī has made the mirror, it is truly very good; on it are Immortals . . .»

225. Tomioka p. 86, pl. 22: »Mr. Liu has made the mirror, it is truly very good» etc. Tomioka deciphers 莫 *mo* *ta* *hao* (cf. 166) but the plate clearly shows that we have to do with a variant of *chen*; *mo* would give no sense.

226. Umehara Shina kokyō p. 140: »Here is a fine mirror, it is truly very skilfully made . . .»

227. Lo, 12 b: »Mr. Chi has made a mirror, it is truly very good; on it are the Immortals Tsī-kao and Ch'i-sung-tsī; . . . the P'i-sie, to the left there is the Blue Dragon; whether they are pleased or angry there will be no disaster; may you have a thousand autumns and ten thousand years; may your life-essence (health) be long-enduring». For Tsī-kao and Ch'i-sung-tsī see inscr. 145, 152 above. I am not very sure of the sense of the *hi nu* »whether pleased or angry». I suppose that these animals, traditional expellers of baleful influences, are angry when such are present, and by their wrath expel them, and that they are pleased when the air is clear — hence in either case the bearer of the mirror can feel safe. The 青 of the last clause is somewhat enigmatic. The character is sometimes used for 清 'pure', e. g. Umehara, Shigaku vol. 11, p. 465: *tso ts'ing king* 作青寳 »has made a pure mirror»; Tomioka p. 211 用青同 »has used pure copper». But it cannot mean here that the *purity* of the mirror will last long; the context shows it to be a question of long *life*, and I take it that 青 stands for 精, which in ancient texts frequently means life-essence, bodily life-force (Pao-p'u-tsī says that »the preservation of the 九精 nine life-essences is the proper way of cultivating a long life»). This must probably be the sense of the 百精 in the partly undecipherable inscription in Tōinro pl. 24 (inscr. 178 above).

228. Lo, 12 b: »Mr. Yüan has made the mirror, it is truly . . .; on it are Tung-wang-fu and Si-wang-mu; the Immortal Tsī-k'iao is in attendance round about them; whether the P'i-sie is pleased or angry, there will be no disaster; may you long preserve your two parents; . . . live long». Cf. 227.

229. A mirror in C. T. Loo's collection: »Mr. Ts'i has made the mirror, it is truly very skilfully made; Tung-wang-kung, Si-wang-mu and the Blue Dragon are

to the left, the White Tiger is to the right; [there are] the Immortals Ts'i-kao (T'k'iao) and Ch'i-jung-ts'i (Ch'i-sung-ts'i); may you live very long».

230. Kin shi so 6,30: »Mr. Meng has made the mirror . . . (for the rest = 22

231. Lo, 13 b: »I have made a bright mirror, it is truly very skilfully made such are rare in the world; it is bright like the sun and the moon; it is suitable for a superior man; may your son attain to [a salary of] two thousand stones [of rice] may you get profit in the market; may you have constant joy without end; may your house be rich and prominent». Exactly the same inscription in Kin shi so 6,30.

232. Lo, 10 b: »The Shang-fang has made the mirror, it is fine and good; it is bright like the sun and the moon; such are rare in the world; may you have great wealth and prominence; may you have sons and grandsons; great good luck and felicity». *Yang* is *kia tsie* for *siang*.

233. Lo, 10 b: »The Shang-fang . . . world (as 232); on it is the Immortal Ch'i-sung-ts'i». Rimes *hao* (χōg): *yu* (giüg); *ts'i* (tsiəg).

234. Tomioka p. 211, pl. 51: »Mr. Li has made the mirror, it is fine . . . work (as 232); he has engraved and worked the animals proper to the various parts [of the mirror]; they are all there; great good luck and felicity». Rimes *hao* (χōg): *yu* (giüg): *tsai* (dz'əg): *i* (ziəg).

235. Kin shi so 6,20: Mr. Lung has made the mirror, it is fine . . . all there (as 234); may you long preserve your two parents; may you have grandsons and sons; [there are] Tung-wang-kung and Si-wang-mu; great good luck and felicity!».

236. Tomioka p. 21: The Shang-fang has made the mirror, it is fine . . . and sons (as 235); may your wealth attain to that of one of the three dignitaries; may you have profit in the market; may you hand it down to and inform later generations; may you have joy without end». Rimes *hao* (χōg): *yu* (giüg): *tsai* (dz'əg): *ts'i* (tsiəg): *shi* (diəg): *i* (ziəg).

237. Tomioka p. 21: »Mr. Wang has made the mirror, it is fine and good; it is bright like the sun and the moon; may you preserve it for generations; the one who carries this mirror will not know ageing; his longevity will be like [that of] Tung-wang-kung and Si-wang-mu and the Immortals Ts'i-kao and Ch'i-sung; may you long preserve your two parents; may you have . . .» The missing words must be »grandsons and sons».

238. Hallwyl Collection L, 15: »The Shang-fang has made the mirror, it is fine and good; it is bright like the sun and the moon, it illuminates the whole world; to the left is the Blue Dragon, to the right the White Tiger; [the maker] has followed

all the proper norms and orderly principles; [there are] the Red Bird and the Black Warrior; [may your sons and grandsons] be numerous and prosperous». The inscription is a mixture of common formulas abbreviated. The last clause in its full form: *tsi sun fan ch'ang* occurs e. g. in 176 and 240.

239. Lo, 9 b: »The Shang-fang has made the mirror, it is fine and good; the White Tiger and the P'i-sie occupy the central region; may your house be rich and prosperous; may you have grandsons and sons; may you have it [the mirror] as a protection for your person». Rimes *hao* (χōg): *tao* (d'ōg): *tsi* (tsiēg): *pao* (pōg). Exactly the same inscription in Kin shi so 6,2.

240. Kanshikikyō p. 556: »The mirror made by master Fu is really pure and bright; the one who carries it will be rich and prominent; his life will be long; to the left is the Dragon, to the right the Tiger; the Red Bird and the Black Warrior conform to the yin and the yang principles; the Shan-yü (king of the Huns) comes and submits as a subject and takes his seat in . . . of the Han; may your sons and grandsons be numerous and prosperous; may you have joy without end». Rimes *ming* (miāng): *ch'ang*: *yang*: *yang*. For the phrase *fu yin yang* see inscr. 89. The lost word after Han must be *t'ang* 'hall' (as shown by the rime): takes his seat in the hall of the Han house. Mr. Gotō may not have read the first two characters *Fu tsī* correctly; Umehara Kankyo p. 178 gives an inscription which is evidently from the same mirror, and he reads 李 *Li shī* Mr. Li.

241. Umehara Shina kokyō p. 139, pl. 84: »Mr. Wang has made a mirror, it is exceedingly bright; the copper comes from Sü-chou, its engraving is achieved; the Lion and the P'i-sie molest (i. e. expel) the baleful things; Immortals, holding tokens of authority, sit in their hall; may the one who holds [the mirror] have great good luck and joy without end». Rimes *ming* (miāng): *ch'eng* (diēng): *ying* (jēng): *t'ing* (d'ieng): *yang* (jāng). The phrase *Shi-tsī P'i-sie niao k'i ying* is interesting. 嬺 *Niao* = 撫 'to disturb, molest'; it is regularly used of spiritual influences, e. g. in *Huai-nan-tsī*: *shang sī che, k'i kuei niao* »when a man dies by injury, his soul *niao* causes trouble, is nefarious». *Ying* must be read in the light of a passage in *Huai-nan-tsī* (Pen king hün, *Huai-nan-tsī* hung lie tsī kie p. 8, p. 7 a), where all kinds of ogres which molested the human world at the time of Yao are listed. Among them were 九 翼 *kiu ying*, which the Han commentator Kau Yu explains: *shuei huo chi kuai wei jen hai* 'bogies of the water and the fire which are baleful to men'. The Lion and the P'i-sie molest i. e. expel the baleful things.

242. Seligman Collection (photo in Mus. of Far East. Antiq.): »The rule of the seven words originates from the mirrors; may you long preserve your two parents;

may you benefit your grandsons and sons; may [the mirror] eliminate what is baleful; it is suitable for the market». Rimes *shī* (s̥iəg): *tsī* (ts̥iəg): *shī* (d̥iəg). The first clause *ts'i yen chī ki ts'ung king shī* (so also in an inscr. K'i ku shī 15,25) is highly interesting. »The rule of the seven words» refers to the seven-worded lines of the stanzas, which are quite regular in mirror inscriptions, *inter alia* in this very verse. Indeed, in the Shī king there are no seven-worded lines, generally four-worded ones, and the earliest examples of seven-worded verse lines are to be found in certain parts of the Ch'u-ts'i. The author of our inscription seems to vindicate that this kind of verse first became popular through mirror poems.

243. Lagrelius Collection: »The inscriptions in seven words (lines of seven words) originate from the mirrors; the Blue Dragon is on the left, the White Tiger is on the right; may you long preserve . . .»

244. Tomioka pl. 46: »The rule of the seven words originates on the mirrors . . .»

245. Lo, 9 b: »The rule of the seven words originates from the mirrors; I have refined copper and tin and eliminated their dregs; from them I have made the mirror; may you have grandsons and sons (or: it is suitable for grandsons and sons? cf. inscr. 2 above); may you long preserve your two parents; may you enjoy being free from . . .; may your longevity outstrip [that of] metal and stone and [that of] Si-wang-mu; made by T'ang An». Rimes *shī* (s̥iəg): *tsī* (ts̥iəg): *tsī* (ts̥iəg): *mu* (məg).

246. Lo, 9 a: »The (origin =) first appliance of the seven words has its own rule; I have refined and worked copper and tin and eliminated their dregs; [the mirror] eliminates what is baleful; it is suitable for the market; may you long preserve your two parents; may you benefit your grandsons and sons». Rimes *ki*: *tsī*: *shī*: *tsī*. An identical inscription Tomioka pl. 46.

247. Ku king t'u lu, chung, 25: »I have made the bright mirror; such are rare in the world; it is bright like the sun and the moon; may your Highness have sons and grandsons; may its (the mirror's) master's life be long; may you have joy without end».

248. Lagrelius Collection: »Mr. Tu has made a precious and marvellous mirror; there has never been such a one in the world; he has refined the flower (essence) of five . . . (metals?), completely and unlimitedly; on it are Si-wang-mu and Jade girls (fairies); may you have grandsons and preserve your sons; may you obtain what you love; if a magistrate carries it (the mirror), he will be promoted in his office and rank; if a white-dressed man (private man) carries it, his money and property will be sufficient; may you be as unlimited (everlasting) as Heaven». The lost word is probably *kin* 'metal'.

249. Umehara Kinenkyō p. 28: »The period Yung-an, 1st year, I have made the bright mirror; by it one can reflect the light; may the one who carries it have high age; may its maker live long». Rimes *ming* (mǐng): *sheng* (sēng). Yung-an 1st year may mean A. D. 258 or A. D. 304.

250. Ku king t'u lu, chung, 27: »[Mr.] Wu has made the mirror, he has disposed and engraved the figures; to the left is the Dragon, to the right the Tiger; they eliminate . . . what is baleful; may the one who carries it live long; may its maker have ten thousand felicities».

251. Umehara Kankyo p. 181: »Mr. . . . has made the mirror; may you have many sons and grandsons; on it are Tung-wang-fu and Si-wang-mu; may you live like (as long as) the stone of the mountain».

252. Umehara Kinenkyō p. 16: »I have made the bright mirror, it is pure and good; . . . oxen and sheep; may you have a thousand houses; may your property be three hundred thousand (pieces of money); may you become a prince or a king; may your official position attain to that of one of the three dignitaries; may you live long . . . ». Lo, 15 b, has the same inscription except for 三富 'three fortunes' instead of *san i*.

253. Tōinro 19: »San-wu has made the mirror, it is different from (the crowd =) the ordinary ones; may your seven sons and hundred grandsons [obtain] strength from Heaven; may your prominence attain to that of one of the three dignitaries . . . ; may your longevity be like [that of] metal and stone; may you have joy without end». Rimes *i* (gięg): *li* (lięk): *ki* (g'ięk). The common formula *shang-fang yü king* »the Imperial mirror from the Shang-fang», here corrupted into *shang yü king*, has erroneously been inserted in the middle of the inscription. San-wu is a family name which is mentioned e. g. in the Liu Ch'ung chuan of the T'ang shu.

254. Umehara Kinenkyō p. 19: »The period Huang-wu, 6th year, 5th month, jen-tsī, 4th day, kuei-ch'ou, I have made . . . ; may you become a king or a prince; may the men who carry the mirror all get high age; may their sons and grandsons be numerous; may they all become dignitaries and ministers; may they obtain a property of many hundred oxen and sheep». The line *tsao tso san ming chi* 三命之 I cannot translate. I wonder whether it is not wrongly deciphered and should run: 三合之 »I have made [the mirror] and of three [elements] mixed it» i. e. mixed three metals in making it? Tomioka has the same inscription p. 116 and p. 63 (pl. 32) with certain faulty readings. The plate 32 seems to me to favour my emendation. The year is A. D. 227.

255. Kin shī so 6,23: »Mr. Chang has made the mirror; may you become a prince or a king; your house should become very rich; may you have joy without end; may your sons and grandsons be complete in number and be in the centre; may you long preserve your two parents; may you (your family) generation after generation be prosperous». Rimes *wang: yang: yang: ch'ang*.

256. Umehara Shina *kokyō* p. 138, pl. 83: »The new-made mirror has a decoration, it is bright like the sun and the moon; it enlightens the T'ien-liang palace; may you long preserve your sons and may you have grandsons; may your wealth be like Heaven; may your official position attain to that of one of the three dignitaries; . . . . a prince or a king; to the left the Dragon and to the right the Tiger eliminate what is baleful; the Red Bird and the Black Warrior . . . Quarters; . . . . high age [like] Tung-wang-fu and Si-wang-mu; may the one who carries [the mirror] live long; may the one who buys it have a longevity like [that of] metal and stone; the mirror . . . ». T'ien-liang is the name of two stars in a constellation of the Northern hemisphere (see *Tsin shu*, k. 11, p. 8 a); here, however, it is a question of the T'ien-liang palace mentioned in the Si king fu of Pan Ku (*Wen süan* k. 1); cf. inscr. 104: *chaou yü kung shi* «it illuminates in the palace chambers».

257. Lagrelius Collection: »The roads are long and distant; on them are passes and fords; the mirror does not conceal the feelings; be careful that we do not forget each other».

At the end of the inscriptions in Chinese characters I give a table of the kia tsie and abbreviated or enlarged characters occurring in our 257 inscriptions.

宜長官秩位二常酒侍大萬富 39 大樂母見與大見下  
吉通高官官年家宜人 32 壽上忘 42 富九 51 54 人 59 天未當曾飯不年明長而凍而為以竽患  
大里宜宜高五 24 事美翼延大相央貴央忘忘美吉光樂必思強久長而歲久 76 光以還患是  
作交孫象 20 23 宜富等天母天相常相長長幸未央見萬光石期前宜銅千與秋而組綠安必  
吾邪子 16 公公長貴食與父傳長 41 勿 47 見陽樂未 81 秋之山母侍鏡治光羊千○綠貌必而  
辟宜秩三三公長酒極利上央忘思忘相大長樂卿千日如反見為凍日不光而鏡容居居  
子有長官至至三 27 宜母年福未相相不下光平君王見生日不之 73 如去 74 羊為觀食食  
宜上官大位位至万富富萬百樂母長母久天之芳者君 67 有久以央極壽(不以服酒酒  
吉 8 高宜 19 月位大貴貴壽衆富長 44 長 50 53 日人用者央央行悲明未無益文○華衣宜宜  
大人宜 18 位日官利常樂延千貴央忘央忘忘見佳明服未未憂志而樂天年宜壽銅察事事  
貴吾秩官如高日 29 大 33 36 常未相未見相 55 宜大陽生世有予清世與長大益凍昭無有  
孫見 10 宮保明宜金食 31 壽央 38 樂母樂母母忘光下大長累妻起革萬羊革鏡年清鏡樂母  
子詔子宜長 22 呂千酒喜益未忘安長常長長相月天下王石行風銅秋不文 74 ○以為富樂  
宜孫宜君 18 公明富宜所年樂見貴 43 46 見光母日光天侯金有秋治千去宜(革昌以有富  
長子長 14 鄉三且家盡得延大母富兄忘相之長象之光昭如君 70 淚光壽鏡凍文吉華月有  
子詔子宜公至清 26 有憲歲壽幸 40 弟見不日央芳日之而壽 60 … 72 之益為 75 宜孫銅憲月  
孫長宜宜位位竟富日有萬益壽忘宜母久見未鏡見日明 60 絶思悲月年之央竟子凍有喜  
子 7 君長君官作大事日秋年益常歲幸 40 52 樂明 60 見大芳母相志日延以未為而清日有  
宜子 9 呂 17 高師而母事千延年母萬央忘驅昭明 62 下好願長予而章明樂之王 78 79 日  
月生無官八君尚樂富樂所弓央相央富常不相忘下君光佳相大風無置清旦明侯佳佳 80  
長壽高保 21 右常貴富得母未長未常願長與母天者之石說天秋羊因革萬而而宜宜疆  
王 6 孫宜絕御 25 長貴富父樂央樂 45 48 光極思光服日金母印稀不鏡鉛千○貴芳光志  
天孫子君不公四言 28 常貴保長未昌央忘之無心之陽見如見之前去為治光華而光清心  
子宜 12 世至月貴食 30 樂年貴樂富未相日天王日大 63 寄欲勉傳壽之凍月同昌清信傳

樂白○輝應虎王角昌四明春龍龍澧<sup>85</sup>宜葆復漢陽銅有朱○辟宮陽師治灰辟下知志富精窮光然右角<sup>86</sup>富虎是與交青飲孫天秩用<sup>87</sup>陰善漢羊侯歲于丹出大貝堂起○有勝有掣之明忠龍<sup>88</sup>富家龍昭富駕駕英子上官年孫順有<sup>102</sup>不之萬昭出竟陽服明薪書安青月<sup>89</sup>美昭願左生大福有<sup>91</sup>大然泉玉保直宜万子武新陽辟石秋明銅之丹砾建<sup>93</sup>詔下<sup>114</sup>蓮盞氣以而請長家受上福家自禮食秩引金壽保<sup>90</sup>陰虎金千且善作出子確央○天孫有生懷質楊人樂寶實意大珍物飲人官虎黃久明爵明順右如央清有造同王辟未尊熟<sup>(112)</sup>事復而<sup>84</sup>明宜食陰竟無長得食山萬浮玉○惠四錫爵章富孫治火…漢士<sup>110</sup>北年五之母老違絕清兒盞酒之明天事泉人大壽乘食神憂主銀朱文樂九淶中寺<sup>107</sup>蹕…在二宮志樂平疏母內昭安宜武此予無禮仙上命<sup>95</sup>神見無虎以彭成親子傷治宮人于王舍國校有富物恐而<sup>86</sup>居世玄昭熾樂飲見<sup>94</sup>長龍見集貴右和四之二八母孫壽千死侯萬建治安貴萬澤里泄月孫萬鳥臺富親英山央受交山皇富龍陽掌刻保明真二長孫堂列生始癱長程流永不日二樂亦有家二玉華未天駕大鳳長左丹虎工長如鏡十旁子明士諸准辟<sup>(=112)</sup>作口宜侍玄靈然光八憂神巨孫置神弓富弓飲浮上大清善左而居為○方虎宜辟死民異田孫喜瑟○而忠明星去虎王子時見孫貴引英乘<sup>97</sup>見錫有明清具之陽四右位興望尹奴番子有竽明菴願照列壽白角事四山子孫虎玉龍昌鏡銀亲且錫服用丹主龍高新明令凶財葆<sup>108</sup>建軍子不秩日會拿窮而以法益龍<sup>90</sup>無虎大保子白食蜚富此以<sup>100</sup>清銀孫陽出虎左君志得憲<sup>81</sup>人之慕揭清武年倉央樂右上弓保雲人駕大服和中央錫治子丹銅右明令成蘿將○市官有美驥說忽內玄延詳未親龍<sup>92</sup>秩秩浮仙<sup>98</sup>央爵臺不樂二左憲官乘見孫未…丹治以陽陰銅有左清文五興侯漢人恩驥意○可心<sup>88</sup>爵臺不樂二左憲官乘見孫未…丹治以陽陰銅有左清文五興侯漢人恩侍事事承夫而天虛巨宜置人保浮浮駕太秩孫傳善子丹銅玄漢陽日之工同央舉益多士明恩得<sup>103</sup>不室取巧得中于蘿大之



竟央常有夫考保西道清世任東○辟石陰成明未中自未壽長公有同居氏有陳虎金順鏞○王謂石玄如祥大虎傷羣同陽陰作○明嗣萬  
作樂公鏡樂之右王自白長蔡上有右敝武刻○玄敝朱昌辟作章大邪取出武張令吾吾樂  
吾長三作羊服皆東竟方命○侍常龍壽玄工長鳥壽旁高虎羊○竟辟采銅玄母○  
150 己至是子羊悉道作有壽○尚禮左昌財巧央朱昌四樂右黃○作虛傷善鳥○王央央身  
有位陳追不守有方自守明中富傷富朱傷中詳富掌親龍○之氏距無有朱王西未未百  
好竟有元凶守之竟○明姬同三當大親四大具辟親右保章富工○文竟傷不如王貴昌無  
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155 侯親母龍復樂自公治羊侯子章尚陽王利石○傷子有肺丹治子大宜幽  
156 文陰侯武金朱母師采凶出凍陽竟遂鏡竟  
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士序貴樂命剛凍 182 吾大壽造王熹明早母午作年幽月世服太息萬如四銅虎耳虎而 183 顯德高舉師維幽長 184 息益漢侯 185 光商王庚直吾二竟正貴夷 186 安象生有剛右 187 右消孫高統之身其持竟命 188 從年廣宜侯得三西日女日康明年富四樂民配吉上三龍孫龍子子 189 番配久刻士禽袁主六自象日央子刻午則五位年夫 190 而剛 191 孫○長配○天 192 事元張配午未人州丙上己官元大二羊公竟毅多竟蓄刻作清○清三者子無祿良喜彊 193 衆法設道丙樂仙商月長己高康二十吉之作五服明孫工新子○子律取富刻福 194 萬貴樂氣合序月長母三正命歲昔延十鄉刻王吾節自作子巧 195 吾聞君幽章長銅○(=舉像富舉四六德五明王凍年壽太服 196 御九周東日時惠吾明剛升德戲○竟文王商○幽昌配壽身方元統年光西幽元○年祥 197 九公○虎廿雨四 198 光三高配游配明作侯三精竟番○益百萬象商元得父皆康孫四不未公三○白月風商復德凍吏章母章作昌年凍百明孫無年○象虎三興世王竟永子玄辟樂三商凍龍二復三下聖幽為文王文新鐘增幽容作子節曾無配四練元極東明 199 宜永下傷遷三幽青寅下凍天陽竟羊作父鑠 200 刻壽鏡見吾樂調良克○疆幽無如方考長 198 宿澤高凍鏡商壬天幽孰主明牛皆王崩孫文益明神 201 安商賢銅無萬竟長得壽尚年昌利列畜幽明三歲滅竟豐○作宜鑠並州直崩樂作象長貴三奉道刻刻作命周公作延且吉應六貴巧作凍年殄明穀衆吾富刻會徐子陽富長身其身竟服統三三 202 事凍位午宣昔公三○買三王青太息日應刻命○陽辟剛大師安喜兼命富凍敬序周周氏師商三造孫富大上道○三吾幽三廣作五○大文集出保洛貴師明幽者德商商望見三至吾子大侯商庭昔工 203 克康胡吾節無長○崩邪銅吉出正師良所福作命○幽幽命功竟如月貴竟位幽堂三日宜造平人月時良其福出師律取徐富長身其身竟服統三三 204 事凍位午宣昔公三○買三王青太息日應刻命○陽辟剛大師明命自驩緣明長彊凍長成幽石丙長貿至凍○商中侯作 205 民卅而周師緣洛子三者州貴其賢得陽氏師○竟克師昌明生正富明官竟滿凍日吾○太家六滅臣老至師名幽名出福御奉永主劉其○明其番方長年大方高明孫幽三商日利國年殄奉知羊州有竟右州主道蓄衆大三吾自吉富作師平買作吾造人明三凍廿世多康胡彊山守出傳作傳且明銅



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237 告老且尚子座辟葆右以之吾珍女 249 刻上家力丑數長如父母  
238 芎傳知佳 239 孝臣子長虎宰言 247 作玉極調孫千天哭財央富王脩  
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244 東孫月二德昌朱明出 242 鏡竟王長樂極之長 251 且異五多子梁○關  
245 子宜日保統富虎大樂之之金宜師二白壽師明作黃歲富日朱遠  
246 孫親而長虎室龍甚吉言漱羊其畢秩老其作烏 252 三極皆當明不道  
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○除子英曾服長  
252 親保好赤右道長作者  
253 無人家章辟  
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克鏡詔照交蛟九久昭照說脫印仰羊祥凍鍊而如如而亞極楊揚楊  
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# THE EXHIBITION OF EARLY CHINESE BRONZES

ARRANGED ON THE OCCASION OF THE 13TH INTERNATIONAL CONGRESS ON THE HISTORY OF ART, STOCKHOLM, SEPTEMBER 1933.

When preparation began in earnest for the reception of the International Congress on the History of Art to meet in Stockholm at the beginning of Sept. 1933, H. R. H. the Crown Prince of Sweden, himself an ardent student of Early Chinese art, suggested to the Museum of Far Eastern Antiquities the establishing of a temporary exhibition of Early Chinese bronzes etc. to be arranged in a more detailed chronological system than had so far been attempted.

Thanks to the collecting activities of H. R. H. the Crown Prince, Mr. A. Hellström of Mölndal, Göteborg, Prof. O. Sirén, Stockholm, the brothers Richard and Emil Hultmark, Dr. A. Lagrelius and several others, there has accumulated in Swedish private collections during the last ten to twenty years quite a wealth of Early Chinese bronzes, to a very large extent small objects such as arms, mirrors, buckles, horsetrappings and chariot-fittings etc., which form, in comparison with the relatively well-known bronze vessels, a promising but little cultivated field of research.

The material of Early Chinese Art thus accumulated in Swedish museums and private collections is, it is true, small when compared with the wealth of Early Chinese Art brought together in larger and richer countries, such as England, the U. S. A., Germany and France. But our material is largely of a kind that offers itself readily to scientific study.

It was with a clear realization of this fact that the Crown Prince suggested a novel arrangement of our exhibition in an effort to establish a chronology of Chinese bronze art in greater detail than had hitherto been attempted.

A very considerable part of the material exhibited belongs to the Museum of Far Eastern Antiquities. Still, we should have been very far from the result now reached had not the Crown Prince himself, Mr. Hellström, Dr. Lagrelius and many others mentioned in our list of contributors, unreservedly placed their treasures of Early Chinese Art at our disposal.

Det Danske Kunstmuseum of Copenhagen has during recent years cooperated with us very usefully, and its director, Mr. V. Slomann, further extended his helpfulness by lending us a number of very important pieces.

In the planning of this exhibition and especially in the establishing of the tentative chronological system, H. R. H. the Crown Prince was untiringly helpful, very ably assisted by Dr. Nils Palmgren and Mr. Orvar Karlbeck. To the last-mentioned gentleman is also due the special merit of having collected in China a very large part of the treasures of Early Chinese bronzes shown in this exhibition.

When we began to assemble in the Southern Hall of the museum the Early Chinese bronzes to be exhibited there, all the cases in the two galleries were emptied of their contents, and the question arose as to what to do with these galleries during the exhibition period. We at once conceived the idea of utilizing the empty cases for an exhibition of that remarkable group of bronzes — barbarian from the point of view of the Ancient Chinese, but admirable in their forceful expression of the animal style and in their elegant workmanship —, hitherto but little understood and largely misinterpreted, which are now known as the Ordos Bronzes.

The Museum of Far Eastern Antiquities may perhaps claim to possess at the present moment the leading collection of these relics from the Hiung-nu, which have been found not only in the Ordos desert but along the entire border-land of southern Mongolia and northern China. But we clearly realized from the very outset that a full representation of the Ordos bronzes could be attained only with the cooperation of foreign friends who share with us the interest in these delightful small bronzes.

Mr. C. T. Loo of Paris is the owner of a collection rivalling our own and certainly richer in precious and unique pieces. With the charming courtesy with which Mr. Loo has always favoured this museum, he kindly sent us a selection of his most beautiful and scientifically important specimens.

Two very significant plaques, formerly belonging to Mr. Loo but now in the possession of the Musée Guimet, were kindly lent for our exhibition by that museum.

Messrs. Ton Ying & Co. of New York had sent to our exhibition a beautiful set of 8 specimens, which were heralded by all visitors as belonging to the cream of our exhibition.

Two prominent private collectors of Ordos bronzes, Captain William Mayer, Fort Hoyle, Maryland, U. S. A., and Mr. F. A. Nixon, Tsinan, China, sent to our exhibition the best specimens out of their excellent collections.

Two of the leading European collectors, the venerable veteran Mr. G. Eumoropoulos of London and M. David Weill of Paris, contributed with some of their most interesting Ordos specimens.

For smaller contributions to this exhibition we are indebted to the Metropolitan Museum, New York, and various other lenders, as shown in our list of contributors.

It is fully realized that the closest relatives to the Ordos Bronzes are the corresponding treasures in gold and bronze found in southern Siberia. Already at an early stage of our preparations it became clear to us that an arrangement enabling our guests directly to compare the Hiung-nu remains from the southern border-land of the Gobi (Ordos province) with those from the northern steppe-land bordering the desert (Minoussinsk province), would greatly enhance the value of our exhibition. With this aim in view we approached the Government of the Rus-

sian Soviet Republics, and for several weeks we hoped to get a loan-collection from Russian museums.

When these negotiations finally failed, we addressed ourselves to Professor A. M. Tallgren of Helsingfors asking him kindly to bring here the beautiful collection of Minoussinsk bronzes in the possession of the Nationalmuseum of Helsingfors. These specimens, 380 in number, formed one of the principal attractions in our exhibition of animal style bronzes.

Mr. Loo showed us the special courtesy of personally bringing his contribution to the exhibition of Ordos bronzes. On this occasion he also brought with him a considerable number of early Chinese bronzes, jades and other art objects. To accommodate these beautiful specimens we offered him our library, where he arranged a small exhibition of his own, which became during the Congress days a popular meeting-place of lovers and connoisseurs of Early Chinese art.

The financial burden incurred in preparing these two exhibitions has been borne by the following donors:

Mrs. William H. Moore, New York,  
Mr. Anders Hellström, Mölndal, Göteborg,  
Mr. Ivan Traugott, Stockholm,  
Mr. John Björk, Stockholm,  
Mr. J. G. Löwgren, Saltsjöbaden,  
Mr. G. Ekman, Stockholm.

By far the larger part of the objects shown in the two exhibitions belongs to the Museum of Far Eastern Antiquities. Very important contributions were offered by the following private collectors and museums:

*Sweden.*

H. R. H. the Crown Prince. 197 Chinese bronzes, jades etc. 1 Ordos bronze.  
Nationalmuseum. Stockholm. 14 Chinese bronzes. 1 Ordos bronze.  
Mr. A. Hellström. Mölndal. 67 Chinese bronzes. 5 Ordos bronzes.  
Mr. A. Jonsson. Göteborg. 3 Chinese bronzes.  
Mr. G. Werner. Göteborg. 4 Chinese bronzes.  
Dr. A. Lagrelius. Stockholm. 63 Chinese mirrors.  
Prof. O. Sirén. Stockholm. 93 Chinese bronzes. 1 Ordos bronze.  
Mr. I. Traugott. Stockholm. 18 Chinese bronzes.  
Mr Th. Laurin. Stockholm. 6 Chinese bronzes.  
Dr. Emil Hultmark. Stockholm. 9 Chinese bronzes.  
Mr. A. Lundgren. Stockholm. 6 Chinese bronzes.  
Mr. O. Falkman. Stockholm. 3 Chinese bronzes.  
Mr. J. Hellner. Stockholm. 4 Chinese bronzes.  
Mrs. S. Trygger. Stockholm. 1 Chinese bronze.  
Mr. O. Karlbeck. Stockholm. 8 Chinese bronzes.  
Dr. G. Montell. Stockholm. 1 Chinese bronze.

*Denmark.*

Det Danske Kunstmuseum. 20 Chinese bronzes.

*England.*

George Eumorfopoulos Esq. London. 6 Ordos bronzes.

Mrs. Margot Holmes. London. 1 Chinese bronze. 2 Ordos bronzes.

*France.*

M. C. T. Loo. Paris. 56 Ordos bronzes.

M. David Weill. Paris. 7 Ordos bronzes.

Musée Guimet. 2 Ordos plaques.

*Finland.*

Nationalmuseum. Helsingfors. 380 bronzes from the Minoussinsk region.

*The United States of America.*

Metropolitan Museum. New York. 4 Ordos bronzes.

Captain W. Mayer. Fort Hoyle, Maryland. 21 Ordos bronzes.

Ton Ying & Co. New York. 8 Ordos bronzes.

*China.*

Dr. Li Chi. Academia Sinica. Shanghai. 25 photographs of finds at An Yang, Northern Honan.

F. A. Nixon, Postal Commissioner. Tsinan. 39 Ordos bronzes.

T. Y. King. Shanghai. 2 Chinese bronzes.

Months before the Congress opened personal invitations were sent to a number of scholars of Far Eastern Art, and as a consequence of these invitations we had the pleasure of receiving here during the Congress a number of distinguished visitors such as Mr. G. Eumorfopoulos, London, Professor Perceval Yetts, Courtauld Institute of Art, University of London, Mrs. Margot Holmes, London, Professor E. H. Minns, Cambridge, Generaldirektor O. Kümmel and his two collaborators Dr. W. Cohn and Dr. L. Reidemeister, Berlin, Professor T. Sarre, Potsdam, Professor A. M. Tallgren, Helsingfors, Direktor V. Slomann, Copenhagen, Director Zoltán de Takács, Budapest, etc.

During the visits of the foreign guests to the two exhibitions frequent informal discussions occurred on topics related to the objects exhibited. Finally on the 7th of Sept. a meeting was held under the chairmanship of H. R. H. the Crown Prince. On this occasion the following questions were discussed:

1. Does any connection exist, as to style or otherwise, between the Neolithic (Yang Shao etc.) pottery of China and the style of later Chinese periods?

The consensus of opinion was that certain Neolithic types such as the Ting,

the Li, etc. are common to the Yang Shao period and the early dynasties, but that the decorative style of the early dynasties has no forerunners whatsoever in the Neolithic periods.

2. In what different directions are to be sought the origins of the Yin and Yin-Chou styles? Can an influence be established from the Eurasian animal style? What about some connection with the so-called Pacific style?

The prevailing opinion was that the origin of the Yin style is still unknown. There are striking similarities to Pacific objects but these are of very late date. Everything goes to show that the Yin style is older than the Eurasian animal style.

3. Is it possible to establish definitely a separate Yin style, or do the finds at An Yang and the bronzes exhibited under the heading »Yin-Chou style« belong from a stylistic point of view to one and the same group?

Under this heading the occurrence of provincial bronze art groups was discussed. This discussion also continued under the next heading.

4. Why do we find overdecorated and almost plain bronzes attributed to the same period?

5. What changes did the ornaments on archaic bronzes undergo in the course of time? How explain that on archaic bronzes we find both conventionalized and naturalistic animals, and that in the Sung time and later the conventionalized animals become more and more naturalistic? The t'ao t'ieh for instance was in the Yin and Chou times a highly conventionalized animal but in the Sung time a naturalistic one.

The discussion dealt principally with the occurrence or non-occurrence of elephants and rhinoceros in Ancient China.

6. How far can we use the inscriptions to establish the authenticity and the age of archaic bronzes?

The Shang-Yin and early Chou inscriptions differ in style from inscriptions of later times. We may in time be able by means of inscriptions to date many bronzes.

7. When did the copying of ancient bronzes begin?

It was generally held that the copying of ancient bronzes started during the Sung dynasty.

Furthermore, certain details in the chronological arrangement and terminology of the exhibition were discussed. Apart from some observations in detail the terminology and chronological system of the exhibition seemed to meet with fair approval. The tentative establishment of an intermediate group of bronzes, showing affinities both with the Middle Chou and with the so called Ch'in style was however considered to be hardly warranted by the facts and was in any case considered premature.

Part of the material of Ordos bronzes has been described in the following papers, forming part of our Bulletin 5:

J. G. Andersson: Selected Ordos bronzes.

T. J. Arne: Die Funde von Luan P'ing und Hsuan Hua.

A further paper, J. G. Andersson: Contact influences between Chinese and Ordos bronzes, will be published in a forthcoming number of our Bulletin.

Already during the Stockholm Congress on the History of Art it was suggested that we should publish a volume containing a *Catalogue raisonné* with notes etc. of our exhibition. Plans for such a publication were drawn up on a more or less sumptuous scale. We have however for various reasons had to abandon the idea of a large-scale publication and are now presenting a rearranged edition of our exhibition guide, to be accompanied by a number of plates reproducing specimens which we consider may have a bearing on the chronological system which was the leading idea of our exhibition.

On this occasion the Museum of Far Eastern Antiquities wishes to express its most respectful compliments and thanks to H. R. H. the Crown Prince, who took the initiative in organizing this exhibition and who with untiring patience and in a true scholarly spirit offered us his advice both in arranging the exhibits and in the preparation of the guide.

Our sincere thanks are due also to Mr. Orvar Karlbeck, who with unparalleled persistence and ability has collected the vast majority of the specimens in our exhibition and who with unfailing interest and devotion assisted us during the preparation of the exhibition. A special tribute should be paid to Mr. Karlbeck for bringing to our knowledge Sü Chung-shu's important publication »Piao shih pien chung k'ao shih», which by dating the 14 Piao bronze bells at 550 B. C. has given us the necessary clue for redating the style which was formerly called Ch'in and which we, following Grousset's suggestion, name the Huai style.

Last but not least, we wish to present our hearty thanks to our collaborator during many years, Dr. Nils Palmgren, who with his skilled eye and exquisite taste materially contributed to the success of the exhibition, and who during the early autumn made extensive preparations for a more ambitious publication about the exhibition. He then arranged the plates, a selection of which is here reproduced. The brief description of the specimens has also been prepared by Dr. Palmgren.

In our exhibition of Early Chinese bronzes and jades we tried to arrange in a tentative chronological system a number of objects ranging from the much-discussed finds of An Yang probably dating from the Yin dynasty — which ended in 1122 B. C. according to the orthodox chronology, but which according to recent research probably has to be placed somewhat later, about 1000 B. C., cf. Maspero: *La Chine Antique* p. 55 — down to about the middle of the first millennium A. D. Within the different periods we also tried to keep together a certain number of local groups, which may be more or less contemporary with one another.

### THE YIN STYLE.

Probable date: 11th cent. B. C. and earlier.

#### General characteristics.

Features of this style are above all a rich groundwork of *Lei wen* (meander-like) ornaments. Outlined on this are *t'ao t'ieh* masks and highly stylized figures of other animals (*kuei* dragons and in rare cases birds) or even mere *fragments* of animals. Triangular ornaments often form the transition between decorated and undecorated parts. Especially where animals' heads are carried out more or less in the round, these heads present a distinctly ferocious type, with teeth showing and curled-up lips.

In all probability most of the objects under the present heading were found at An Yang in northern Honan.

A stylistic connection between the latest Neolithic decorated pottery as represented by the Yang Shao and other stages of Neolithic culture and the present objects in ivory, bone, etc. is hardly perceptible. And we do not know of any group of objects from ancient China proper that might fill the gap between Neolithic art and the finds of An Yang, which probably date from the end of the Yin dynasty, or possibly a little later.

Various theories have been put forward to explain this lack of connection. Perhaps the simple solution to this problem is that the missing link has not yet been found and may one day appear as a result of scientific investigation or of chance finds.

#### Fragments of pottery from An Yang (Pl. I).

The style of decoration on this ware seems to possess a good deal of affinity with that of the carved bones, bronzes etc. coming from the same locality. On the other hand it seems to have elements in common with that group of bronzes which in our exhibition was tentatively brought together as probably forming the earliest group of bronze objects outside the An Yang finds and which may date from late Yin or early Chou times.

There seem to be three distinct types of ware from An Yang represented here.

1) Pottery sherds with a cream-coloured or slightly rose-coloured body. Their decoration largely consists of meander-like and zigzag ornaments and also of triangular fields. Special attention is drawn to a large fragment bearing an angular, armlike design, the 'arms' ending in something distinctly resembling four claws. — This seems to be by far the largest group amongst the An Yang pottery.

2) Pottery sherds showing a brick-coloured body. The triangular ornaments mentioned above recur in this group and seem to connect the two groups. In addition, friezes of cicada-like animals and also notched rims appear in the second group.

3) A few fragments show a grey body. Their decoration, so far as can be made out, includes meander-like ornaments with rounded corners. Special attention is drawn to a knob in the shape of an animal's head, practically identical with similar heads on the earliest group of Chou bronzes<sup>1)</sup>.

Objects in carved stone, shell, ivory or bone, probably found at An Yang in northern Honan (Pl. II—III).

The objects in ivory or bone are in some cases inlaid with turquoises. Their style of decoration does not seem to be altogether uniform. Whether this is the result of an evolution of style or is to be attributed to other reasons must at present be considered an open question. In any case the style is well developed and rich, though still retaining all the strength of primitive art development<sup>2)</sup>.

Fragments of bronze vessels and bronze weapons, probably all from An Yang (Pl. IV—VII).

The style of decoration is a developed one, with close affinity to the decoration on the carved bones. It is suggested that the two groups should be considered as contemporary, and, in all probability, contemporary also with the pottery.

<sup>1)</sup> Upon closer investigation it appears that these three types are divisible into several sub-types. The cream- and rose-coloured sherds exhibit very wide variations as regards their hardness. Among the red-coloured sherds some are almost as hard as stoneware (Pl. I, figs. 5—6), whereas others are very soft (Pl. I, fig. 8). These red kinds of pottery, moreover, differ so widely in their mode of decoration that one might possibly suspect them of dating from different periods. Among the grey sherds it is possible to distinguish between those made of a very thick, porous and blue-grey ware (Pl. I, fig. 3) and those of a thin, hard and pure grey ware (Pl. I, fig. 2), in quality not unlike the grey Han ware. Further, these types of pottery differ greatly in their decoration. The softer and very thick ware might possibly be remains of clay cores used for the casting of bronze.

<sup>2)</sup> While both bone and ivory are good and easily worked materials for carving, stone is a more difficult medium as offering greater resistance to the sculptor's tools. This fact probably accounts for the difference in the styles of the different materials. Stone objects exhibit a simplified, sparse and quiet style (Pl. II), whereas bone and ivory objects (Pl. III) are crowded with ornamental details, divided into a minutely carved ground-work consisting of meanders and spirals, on which a larger-scale and more clearly defined main decoration is superimposed.

A characteristic feature of this style is the *Lei wen* pattern, richly developed. Furthermore, *t'ao t'ieh* masks presenting a rather angular shape, cicadas and S-shaped snakes with triangular heads also seem to form part of this mode of decoration. Altogether this style has the same distinctly "ferocious" aspect as will be found in the decoration of the carved bones from An Yang.

### THE YIN-CHOU STYLE (Pl. VIII—XVI).

Possible date: late Yin and early Chou. 11th—10th cent. B. C.

#### General characteristics.

On comparing this group of bronzes with the carved bones, pottery and bronze fragments from the An Yang site, it becomes obvious that a good many connections are to be found. In fact, the suggestion is ventured that the present group of bronzes should be considered as partly contemporary with the An Yang group. The name of "Yin-Chou style" is suggested for the group now under discussion.

Characteristics of this style appear to be:

- 1) The vessels etc. in most cases evince a certain broadness or boldness of outline, though elegant forms are not altogether excluded (Pl. VIII—XI).
- 2) There is a marked tendency to fill up the entire surface of the objects with a variety of ornaments. Overcrowding of the surface is in fact often seen. The whole exterior of many vessels seems to be teeming with life (Pl. VIII and XI).
- 3) In addition to the *Lei wen* pattern and the *t'ao t'ieh* masks, which seem to be as ubiquitous here as they are on the objects from An Yang, there are to be found a multitude of other animals, in some cases almost naturalistic, in other cases as highly conventionalized and as fragmentary as on the An Yang finds. Highly conventionalized birds now become a more common feature.
- 4) The angular shape of the *t'ao t'ieh* masks with their horns curled up in angular, not circular bends, is practically speaking identical with corresponding features of the An Yang objects (Pl. X). The horns of animals often take on a peculiar, broadly bottleshaped form. This again is already found on the An Yang carved bones. The horns belonging to rams' heads have a kind of angular stripes right across them. Kuei dragons are common (Pl. XVI). Their tails are often curled up in much the same angular way as the horns (Pl. XI, fig. 1). Protruding eyes (Pl. XI, fig. 1), and a tendency to fill up even the surfaces of heads with ornaments of varying kinds are other features of this style. This, combined with grinning teeth and snarling jaws (Pl. XV), gives these heads a very ferocious look.
- 5) The triangular patterns forming borders on certain An Yang bones are still met with, though they are perhaps not as common as before (Pl. VIII).
- 6) Real human figures make their first appearance in this group, the type being well defined and most characteristic.

7) On bronze vessels of this Yin-Chou style ridges are often found running vertically up and down the corners or the sides, thus dividing the vessel into vertical sections (Pl. VIII—IX). These ridges are often cut up into a series of small square or hook-like projections (Pl. IX). Prototypes of these may be found on some of the bone pins with animal heads from An Yang (Pl. III, fig. 3), and also on a crescent-shaped object in marble ending in a calf's head from the same locality (Pl. II, fig. 1).

8) Independent of the aforementioned ridges, fairly large hook-like excrescences are often found in the most unlikely places. These have been called the "Chou hooks". They seem to add a good deal, as do also the ridges, to the wild, ferocious and often somewhat barbarous aspect of these bronze vessels of the Yin-Chou style; cf. The Eumorf. Coll. Yetts I. Pl. IX and Pl. LXXII A. 157.

Attention is drawn to a small group of objects, chiefly weapons, the decoration of which consists of coils, triangles, angular spirals etc. made up of narrow parallel lines (Pl. XIV, fig. 1). A rather striking resemblance to this decoration may be found on the carved bone dragon belonging to the Royal Ontario Museum, Toronto; cf. Sirén: A History of Early Chinese Art. The Prehistoric and Pre-Han periods. Pl. 13.

#### **S p e c i a l k u e i - d r a g o n g r o u p (Pl. XVI).**

This group has been placed by itself owing to the fact that it seems to show some difference from the ordinary Yin-Chou style. No difference as to date is suggested, however, though it is quite possible that the special kuei-dragon group runs on into the next period, the middle Chou style (see Pl. XVI, figs 2—3). In the case of the Tuan Fang altar in the Metropolitan Museum of Art, New York, objects of the special kuei-dragon group are said to have been found together with bronzes certainly representing the ordinary Yin-Chou style. Characteristic of this group is the presence everywhere of more or less elongated kuei dragons, which sometimes form the sole decorative feature against a background of *Lei wen*.

### **THE MIDDLE CHOU STYLE.**

Possible date: 9th—7th cent. B. C. or somewhat later.

(Pl. XVII—XXVI.) •

#### **G e n e r a l c h a r a c t e r i s t i c s .**

Under this heading have been placed those bronzes which are believed to represent the mature Chou style. The larger bronzes might be characterized as showing an ornamentation of mostly narrow bands, conventionalized animals etc. with hardly any relief at all. It gives one the vague impression of a somewhat geometrical style. It is obviously affiliated to—probably derived from—the Yin

and Yin-Chou styles. In the case of animals' heads decorating handles etc., these give the impression of an increased naturalism.

Some larger bronzes show somewhat the same kind of decoration as described above, except that the design is broader and tends to become more raised. Moreover, every sign of a geometrical aspect is gone, the design and feeling being of a definite «baroque» nature.

It is suggested that these groups of large bronzes date from about the same period, representing lines of development coordinate to one another.

Points characteristic of the middle Chou style appear to be, according to the present schedule:

1) The general outline of the larger bronzes (vessels) seems to become a little less squat and slightly more elegant (Pl. XVII—XXII).

2) The tendency to overcrowd the surface, found in the preceding Yin-Chou style, is far less conspicuous. On the contrary, a certain sobriety prevails in many, though not in all, cases. The decoration is thus often restricted to more or less broad zones round the neck, the foot or the middle of a vessel (Pl. XVII).

3) The elements of decoration are about the same as in the Yin-Chou style. Borders made up of scale-like ornaments become more prominent. The t'ao t'ieh heads tend to become less savage-looking, and almost naturalistic heads of lions etc. are common, especially amongst the smaller bronzes. Low, button-like knobs with spirals curling in towards the centre, which are only very rarely found on earlier bronzes, now become more numerous, especially on the kind of vessels usually styled Tui (Pl. XXI, fig. 2).

As a general impression it might be said that the middle Chou style becomes rather smoother, thinner, more flattened out, than the preceding Yin-Chou style. It certainly becomes less wild and heavy-looking.

#### Horse equipment (Pl. XXIII and XXVI).

There seems to be reason to believe that a good many of the smaller bronzes from ancient China formed part of the trappings etc. of horses. Others must have been used for decorating chariots. We have reproduced a few of these objects, showing the mature Chou style. It is evident that the objects occurring in pairs must be side-pieces belonging to bits (Pl. XXVI, figs. 4—5). The long, straight bronze objects, usually ending in a lion's head, may have been used as frontal adornments of horses' heads (Pl. XXVI, figs. 2—3). And it seems probable that the forked, panache-like, flat objects, were affixed to horses' trappings (Pl. XXVI, fig. 1). Generally acknowledged as being axle caps for chariots is a group of tube-like objects (Pl. XXIII, fig. 2). Observe the elongated shapes of these middle Chou axle caps, having as a rule one end closed, in contrast to the caps of the succeeding Huai style, where both ends are usually open and the whole cap is comparatively shorter and more stumpy looking (Pl. XXXVI, figs. 5 and 6).

**HUAI STYLE (so-called Ch'in style).**

Possible date: 7th or 6th—3rd cent. B. C.

(Pl. XXVII—XLII.)

**Attempt at dating.**

Already for some time it has been generally felt that the approximate date for the beginning of the so-called Ch'in style must be a good deal anterior to the beginning of the reign of that dynasty in the latter half of the 3rd cent. B. C. There seem to be weighty reasons for this. In the *Piao shih pien chung k'ao shih* by Sü Chung-shu, a treatise on 14 bronze bells from Honan, very good reasons seem to have been given by the author for dating these bells at 550 B. C. For their inscriptions deal with certain historical events in such a way that — according to Professor B. Karlgren, who has read the Chinese text of Mr. Sü and kindly communicated the conclusions of that author—in all probability they were actually made about that date. Their style of decoration is certainly quite characteristic of what is usually known as fully developed Ch'in style.

Furthermore it may be said that anyone acquainted with early Chinese antiquities will have been struck by the fact that the number of bronzes in public or private collections and at the art dealers showing the so-called Ch'in style of decoration is at least equal to, if it does not exceed, the number showing the Yin-Chou and middle Chou styles. The same applies to the early Chinese antiquities of the Museum of Far Eastern Antiquities in Stockholm, this collection having been brought together from the most varied sources and without any intention of favouring any special style or local group. Any hypothesis concerning the duration of one style or another, based upon a calculation of quantity, will of course necessarily be of an arbitrary nature and is here not going to be attempted. In any case it seems a fact, acknowledged by most specialists, that all of the many objects showing this style cannot possibly have been made during the short reign of the Ch'in dynasty, nor could they have been limited to the Ch'in feudal kingdom, but that at least a large part of them must have been made considerably anterior to the beginning of the Ch'in dynasty and in various parts of China.

For these reasons it may be considered justified to place the beginning of the style in question anterior to the probable date 550 B. C. of the *Piao* bells. For convenience's sake this date is here put somewhere about the year 600 B. C.

In this connection it is here put forward for consideration that what has hitherto been known as the Ch'in style should be given a different name. The name of Huai style is proposed, following Grousset's suggestion in his book "Les civilisations de l'Orient", since the Huai river valley has yielded such a large number of bronzes of this style.

**General characteristics.**

A large number of bronzes showing the fully developed Huai style come from

the neighbourhood of Shouchou in the Huai valley. They all show more or less of the characteristic greyish "water-patina".

The characteristic features of the Huai style appear to be:

1) The outlines of the vessels are far more refined than before (Pl. XXIX and XXXIII). Some of the vigour of the earlier vessels has been lost. The whole style is a more elegant one. The manner of decoration tends to become very complicated.

2) Elements from the Central Asiatic (Eurasian) animal style are more perceptible than before. Perhaps the most striking of these foreign elements is the crouching tiger. It is largely used for handles (Pl. XXVIII).

3) S-shaped or angularly coiled dragons interlacing with one another (Pl. XXVII and Pl. XXX, fig. 2). At times the dragons degenerate into mere ornamental bands (Pl. XXIX). They are usually flat and stand out against a slightly sunken background. Their surface is generally filled with a pattern of round and triangular spirals.

4) True, round spirals usually in pairs, separated by pairs of triangular spirals (Pl. XXXV, fig. 1). This pattern occurs mostly in backgrounds, but also as the chief element of decoration.

5) Pairs of spirals, each twisted into S-shape. Chiefly for background patterns (Pl. XXXV, fig. 5).

6) A kind of false meanders.

7) The string ornament (on mirrors (Pl. XL, fig. 1).

8) The plait ornament (Pl. XXVII, XXXIII, and XXXV, fig. 6).

9) Rosettes with 4 leaves round a circular disk (not common) (Pl. XXXV, fig. 5 and XLI, fig. 1). Perhaps this may be the forerunner of the characteristic Han rosette?

10) The dot motif: rows of dots or fields filled with dots (Pl. XXXII). This is a very common and characteristic element of the Huai style.

11) The pattern of abundant hooks and volutes. Very baroque in aspect and a real feature of the Huai style. There are several varieties of this mode of decoration (Pl. XXXV, fig. 1). In some cases naturalistic fragments of animals — such as feet with claws — suddenly appear amongst the hooks and volutes (Pl. XXXIII and Pl. XXXV, fig. 1).

#### H u a i - s t y l e o b j e c t s f r o m n o r t h e r n S h e n s i a n d S h a n s i .

Undoubtedly the Huai style has a much wider range than the river valley from which it has derived its name. Thus for instance a group of axle caps for chariots from Yülinfu seems to be of a special and uniform type, showing a modification of "the pattern of abundant hooks and volutes".

A very famous find of the Huai style is formed by the Li Yü bronzes from northern Shansi near Tatung. Some few characteristic specimens from this find were included in our exhibition (Pl. XXXV, figs. 3—6).

Highly interesting but lacking detailed data, as to provenance are two animal figures, cast in solid bronze. One, representing a tiger (Pl. XXXIV), is of quite exceptional beauty in its bearing. The other, a horse, is far more primitive in execution. But they both seem to show a certain amount of primitive feeling, and a certain awkwardness in the treatment of details (for instance the legs of both animals) which would preclude their being attributed to Han times. For these reasons it is suggested that they ought to belong to the Huai style.

#### The Huai-style objects from northern Honan.

Another find of the Huai style was recently made in a tomb stated by Karlbeck as being located at Ku Wei Tsun, Wei Hsien, Honan. It contains fragments of lacquered wooden beams and attached to these are large bronze t'ao t'ieh masks.<sup>1)</sup>

In our possession there are also small lacquer fragments, said to have been found in the same tomb as the wooden beams. Presumably they belonged to a wooden vessel.

#### Belt-hooks (Pl. XXXVII—XXXVIII) and mirrors (Pl. XXXIX—XLII).

The centuries preceding the short reign of the Ch'in dynasty was a time of political strife and upheaval in northern China. While very gradually the foundations were laid for the formation of a centralized, powerful Chinese empire, a number of contending states were struggling for supremacy. It is conceivable that this state of unrest may have had something to do with cultural evolution, possibly also with the whole mode of living of the people. Thus chariot fittings and horse trappings so characteristic of the middle Chou style are no longer found. On the other hand, there developed new types of small bronzes, foremost of them the mirrors and belt-hooks.

The Chinese classics tell of the existence of mirrors already during the Chou dynasty. These statements probably refer to the latter part of the Chou dynasty during which the Huai style dominated according to our chronology. In fact it is doubtful whether there exist any Chinese mirrors which could be dated earlier than the beginning of the Huai style.

A special type of mirror, which was labelled "Shouchou group" in our exhibition, contained specimens, which have been purchased in or near the town of that name in the Huai river valley. There was another type labelled "Loyang group" in our exhibition, which contained pieces of the kind shown in Pl. XLII. It is suggested that the two groups are contemporary. The difference in type is distinct and interesting. It may of course be accidental but as there are whole series of these objects showing the same distinctive features when found in the same

<sup>1)</sup> See Karlbeck: Notes on the archaeology of China: Bulletin N:o 2, The Museum of Far Eastern Antiquities, Stockholm, pp. 201—207 and Pl. VI—VIII.

districts, it may be worth while keeping in mind the possibility of two local groups.

A problem of great difficulty arises in trying to settle the question of where to draw the line between the pre-Han and the Han group of mirrors. They seem to run into each other in the most puzzling manner.

The same difficulties as were encountered when attempting a chronological classification of the early mirrors were again experienced when dealing with the belt-buckles (belt-hooks). A small series is tentatively attributed to the end of the Middle Chou style (7th-6th cent. B. C.) (Pl. XXXVII, figs. 1—2).

Another large group has been allotted to the Huai style (7th or 6th—3rd cent. B. C.) (the rest of Pl. XXXVII).

On examining the construction and proportions of the belt-buckles (belt-hooks) it will be found that the early ones are as a rule far smaller in size than those attributed to the Han period. Furthermore, on the early belt-hooks the buttons are placed very far back and in some cases attain a considerable size as compared with the size of the belt-hook itself (Pl. XXXVII, figs. 4 and 8). In some of the earliest examples the stem of the button is curved, thus continuing into the body of the belt-hook without any visible transition (Pl. XXXVII, fig. 4). As a consequence the decorative element, which finishes off the back end of the belt-buckles, is so to speak stuck on to the place where the curved stem of the button imperceptibly continues into the body of the belt-buckle. The actual hooks at the front end of the belt-buckles are rather square in shape in some of the early examples (Pl. XXXVII, fig. 9) and do not end in an animal's head, a feature never missing in the later ones.

#### THE HAN STYLE.

Probable date: Han dynasty (206 B. C.—220 A. D.) and somewhat later.

Pl. XLII—LIII.

#### General characteristics.

The Huai style seems to pass over into the Han style fairly imperceptibly. But the mature Han style certainly seems on the whole to be a good deal more given to naturalism and may perhaps be said to show a still higher technical skill than the work of the preceding period.

The vessels lose something of their strength, which, notwithstanding all the refinement of the Huai style, was still partly retained during that period. Their outlines become richly profiled (Pl. XLIII), cut up as they are by ridges and bands. There is a tendency to place the vessels on short, stumpy feet, mostly in the shape of squatting bears. Gilding comes in, and many objects are richly inlaid with gold and silver and semi-precious stones<sup>1</sup>). Ornamentation partly runs along more or

<sup>1)</sup> Technically speaking, the art of metal-working is now divided into the art of bronze-casting and the goldsmith's art. The latter art recognizes at this period such different technical

less geometrical lines — the well-known lozenge-shaped borders being perhaps the most characteristic —, partly it tends to reproduce entire animals or even human figures in a distinctly naturalistic way. Where animals are executed "à ronde bosse", they are essentially naturalistic.

The tremendous variety met with in the Han mirrors seems to form a parallel to the similar phenomenon to be observed in the case of the belt-buckles. A quantity of different groups can be singled out, many of which probably are more or less contemporary or at least have partly run alongside of one another. Moreover, there are often stylistic connections between these groups, thus making them interlace in a most intricate way.

The transitional stage between the Han and the post-Han mirrors and belt-buckles also seems to be difficult to define, evidently owing to the fact that artistic development must have been uninterrupted during this phase.

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forms as firegilding, silvering, plating and chasing, also the inlaying of semiprecious stones such as turquoise — already used on bronzes during the period when the Chou style flourished — and jade and glass, which had now reached the Far East.

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PLATE I.<sup>1)</sup>

YIN STYLE.

Fig. 1. (H. R. H. 977.) An ornamented fragment of an earthenware vessel. The ware is grey with a brown tone, scratches easily with a knife. The decoration in low relief. The form is that of an ox's head designed to fill a triangle, with short horns pointing obliquely outwards and a square in its forehead. Acquired in An Yang, Hsiao Tun, Honan. L. 30 mm. Th. 22 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (H. R. H. 979.) Fragment of grey pottery with incised decoration. The ware has the grey colour of the Han ware but is harder, though it scratches easily with a knife. The core is more porous and darker than the outer layers. The sherd has formed part of the upper or lower marginal zone of a vessel. Acquired at An Yang, Hsiao Tun, Honan. L. 60 mm. Th. 10—12 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 3. (K. 11074: 31 b.) Fragment of earthenware vessel or clay mould. The ware is bluish grey with a white slip; it is brittle and easily scratched, also very thick. The decorative parts in very high relief and shaped like narrow ridges; there is also the front part of a cicada. This may possibly be a fragment of a clay mould for use in casting a bronze vessel. Stated to have come from An Yang. L. 50 mm. Th. 15 mm. Property of M. F. E. A.<sup>2)</sup>

Fig. 4. (H. R. H. 813.) Fragment of a vessel. The ware, both on the surface and all through, is white and soft, easily scratched with a knife. The decoration in fairly low, flat relief with a ground-decoration consisting of meanders. The sherd probably belonged to the foot of a vessel. (See Umebara: *Étude sur la poterie blanche fouillée dans la ruine de l'ancienne capitale des Yin*. Kyoto, 1932.) Gift of Mr. Lo Chen Yü, Tientsin. Stated to have come from An Yang. Br. right across the edge of the mouth 97 mm. Th. 8 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. (H. R. H. 980—981.) Sherd of a large vessel. The ware is thick, red and extremely hard. Does not scratch with a knife. Stoneware. The sherd has a raised, rhythmically notched fillet (fillets of a somewhat similar kind occur also on the prehistoric Pan Shan pottery from Kansu). Above the fillet runs a border with triangular pattern in the Yin style. Purchased at An Yang, Hsiao Tun, Honan. L. 160 mm. Th. 10 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 6. (H. R. H. 973 a and b.) Sherd of a large vessel, probably the same as

<sup>1)</sup> These explanations to the plates are prepared by Dr Nils Palmgren.

<sup>2)</sup> M. F. E. A. throughout this chapter = Museum of Far Eastern Antiquities, Stockholm.

that to which the preceding sherd belonged. The ware is of the same quality. At the top are parts of a border with triangular ornamentation. Below the border, between two high ridges, is a zone containing a primitive animal cicada-like pattern. Bought at An Yang, Hsiao Tun, Honan. L. 158 mm. Th. 9 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 7. (K. 11000: 49.) Sherd of white ware (see under fig. 4). The patterns moulded, not cut. From An Yang, Honan. L. 80 mm. Th. 9 mm. Acquired through Prof. O. Sirén. Property of M. F. E. A.

Fig. 8. (H. R. H. 1008.) Sherd from a fairly large vessel. The ware is very light-coloured, pink, quite distinct in character from the white ware. It scratches easily with a knife and on the exterior shows traces of a white slip. Decoration in somewhat low, flat relief over a sunken ground-surface. The details appear to have been chiselled out by hand. From An Yang, Honan. L. 107 mm. Th. 7 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 9. (K. 11000: 46.) Piece of the upper part of a vessel made of the white pottery. The ware is fairly hard, though a knife will scratch it. The core a very light pink. The outer layer whiter. The decoration moulded. Specially noteworthy among the decorative details are: the frieze of triangles, which terminates near the top, and a demon-like figure showing up indistinctly out of the main decoration, with eyes and horns on the horizontal band below the vessel's neck, beard and chin beneath this border and arms terminating in the feet of a bird of prey on the body of the vessel. From An Yang, Honan. H. 160 mm. Acquired through Prof. O. Sirén. Property of M. F. E. A.

PLATE II.

YIN STYLE.

Fig. 1. (K. 11004: 156.) Marble object, presumably one of the legs of a vessel or piece of furniture of more perishable material. On the front sides is a finely executed decoration in a pure and simple style. On the back are roughly hewn-out sections by which the marble foot was inserted. The decoration terminates at the top in an ox's head rather naturalistic in character. From An Yang, Honan. L. 195 mm. Property of M. F. E. A.

Fig. 2. Large star-shaped mother-of-pearl button. Pierced from one side with a hole in the middle of the button. The four-sided star with its points bored out recur as a motif in later bronze art. L. 52 mm. Br. 50 mm. Th. 10 mm. Said to have been found at An Yang, Hsiao Tun, Honan. Property of Prof. O. Sirén, Stockholm.

Fig. 3. (K. 11004: 157.) Fragment of a marble cylinder, presumably a Ts'ung. Decoration in high relief: an ox's or ram's head. The style simplified. Only the upper flat edge preserved. L. 87 mm. From An Yang, Honan. Property of M. F. E. A.

Fig. 4. (K. 11004: 83.) Fragment of a marble cylinder, presumably a Ts'ung. The flat upper and lower edges are still preserved. Decoration in high relief in the shape of an ox's head, forming a rectangular corner of the cylinder. Owing to the nature of the material the style is simplified. H. 77 mm. From An Yang, Honan. Property of M. F. E. A.

Fig. 5. (K. 11004: 93.) Round turquoise button decorated in relief in its centre; it is a circular disc having in its outer zone five leaves, which rise from the plane of the button towards the points, which are directed obliquely inwards, the leaves together representing a vertical movement. Diam. 40 mm. Bought from Mr. Lo Chen Yü. Stated to be from An Yang, Honan. Property of M. F. E. A.

PLATE III.

YIN STYLE.

Fig. 1. (H. R. H. 807.) Dragon-shaped handle, possibly part of a sword. Ivory. The horned dragon's wide-open jaws have grasped the tang of the sword. Much decomposed and very brittle. L. 162 mm. Stated to be from An Yang, Hsiao Tun, Honan. Acquired through Lo Chen Yü. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (K. 11004: 113.) Ivory handle in the shape of a monster's head with a long and slightly turned-up snout. On either cheek small kuei decorated with horns. L. 95 mm. Acquired through Lo Chen Yü. Stated to be from An Yang, Honan. Property of M. F. E. A.

Fig. 3. (K. 11000: 62.) Ivory hairpin. Handle in the shape of a bird with a huge comb. L. 151 mm. Acquired through Prof. O. Sirén. Property of M. F. E. A.

Fig. 4. (K. 11004: 69.) Bone hairpin. Handle in the shape of a sitting bird with a large crest. L. 111 mm. Acquired through Lo Chen Yü. Stated to be from An Yang. Property of M. F. E. A.

Fig. 5. (K. 11092: 66.) Handle of a hairpin. Ivory. H. 30 mm. From An Yang. Property of M. F. E. A.

Fig. 6. (K. 11004: 115.) Ivory object with a t'ao t'ieh. Use unknown. The object has been inlaid with turquoises, of which only the stones forming the eyes are left. L. 75 mm. Acquired through Lo Chen Yü. Stated to be from An Yang, Honan. Property of M. F. E. A.

Fig. 7. (H. R. H. 809.) Cylinder-shaped ivory tube, possibly a handle, in the shape of a t'ao t'ieh. The eyes inlaid with turquoises. Presumably the ears and snout have likewise been inlaid with turquoises. L. 56 mm. Acquired through Lo Chen Yü. From An Yang, Honan. Property of H. R. H. the Crown Prince of Sweden.

Fig. 8. (K. 11004: 110.) Bone object. Presumably a handle in the shape of a buck's head. The bottom end of the object is broken off. L. 46 mm. Acquired through Lo Chen Yü. Stated to be from An Yang, Honan. Property of M. F. E. A.

Fig. 9. (K. 10744: 1—2.) Ivory fragments decorated in low relief showing portions of two animals, of which only the hind parts, including the tails and one of the hind legs, are preserved. The sub-decoration consists of delicate spiral meanders. L. 63 mm. Th. 4 mm. Property of M. F. E. A.

Fig. 10. (K. 11000: 73.) Bone object, its use unknown. The rear part pointed. The front part in the shape of a broad tiger's head. Same decoration on both sides. In the nose a round grey inlaid stone, passing right through the object. L. 95 mm. Acquired through Prof. O. Sirén. Property of M. F. E. A.

Figs. 11—12. (K. 11004: 112.) Ivory object, its use unknown. It terminates at the top in a tiger's head. On the back are two t'ao t'ieh in low relief against a delicate ground decoration. L. 52 mm. Acquired through Lo Chen Yü. Stated to be from An Yang, Honan. Property of M. F. E. A.

PLATE IV.

YIN STYLE.

(A. H.) Bronze tripod, Ting, of the Yin style, stated to be from An Yang. The legs straight, plain and apparently riveted to the hemispherical bronze body. Technique: cire perdue. A decoration consisting of cicada patterns has been pressed into the ready-made wax mould by means of dies. Deeply patinated with thick incrustations and blue and green tones on the surface. Height with handles 172 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE V.

YIN STYLE.

Fig. 1. (K. 11293: 1.) Fragment of ceremonial bronze vessel. A sacrificial wine-jar called Ku. The fragment, consisting of a terminal socle at the base and vertical ridges, forms the foot-portion of the vessel. On the panels between the ridges is a rich ground-decoration of spiral meanders. Against this ground stands out a much decomposed super-decoration consisting of the eyes, horns and noses of two t'ao t'ieh masks, one half in each panel. On the upper portion, on the boundary-line of the middle section of the vessel, is a border of primitively executed cicadas. Technique: the earlier cire-perdue method: the wax model being made in two halves. Strong green patination covering the entire bronze piece. The inner portions entirely oxidized. Traces of cinnabar on the outer surface of the bronze. Discovered at An Yang. Property of M. F. E. A.

Fig. 2. (K. 11293: 66.) Bronze fragment of a ceremonial vessel, Chüeh. Only the lower half preserved. The legs, with sharp inside edges and triangular in

section, clearly indicate that this is the type of vessel to which it belongs. Owing to the strong decomposition of the surface, all traces of decoration have entirely disappeared. Just above the lower truncated portion of a handle, however, are the clear remnants of a character. This character, which may possibly represent two men offering sacrifice in heraldic postures, has thus had its place on the body of the vessel below the handle. The legs were cast separately and then riveted to the body. The rivets are clearly visible on the interior. The bronze was probably cast in a mould of sand. The surface is composed entirely of green incrustations. The walls are oxidized right through. The fragment was found at An Yang. H. 165 mm. Property of M. F. E. A.

Fig. 3. (A. H. 165.) Possibly the bronze point of a staff, in the shape of an ox's head with upright horns ornamented with spirals. Technique: the earlier cire perdue method. The wax was cast in two half-moulds lacking all details, which were not modelled or incised until later. The completed wax model was embedded in clay by thin soft mud being continually poured on to it. The wax was then melted, the clay mould burnt and the bronze cast inside it. The casting spots are clearly observable on the ring-shaped edge at the bottom. The surface is incrusted with green patina. The walls are oxidized right through. The fragment was found at An Yang. H. 130 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE VI.

YIN STYLE.

Fig. 1. (H. R. H. 1064.) A bronze dagger-axe, Ko. A short rectangular tang with the same decoration on both sides, a sunken circular disc with four upright spiral ribs and a central point. The disc is surrounded by two fishes with upright ornamental ribs on a flat ground. The depressions, now empty, were presumably filled with turquoise inlay. Divided clay mould. A good example of exquisite work in the negative mould is seen here in the clear-cut, deep ornamentation of the tang on a common ground. The clay model was very carefully made and the highest parts of the ornaments in the clay have been levelled to the same plane, with the result that the bottom of the ornamentation on the bronze tang is all of the same depth. Doubtless, however, finishing touches were put to the bronze after completion. The entire surface is heavily incrusted with greenish-blue patina. Stated to have come from An Yang, Honan. L. 212 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (K. 11090: 40.) Bronze dagger-axe, Ko. Socketed haft. On one side of the four-sided tang is a character sunk into the bronze and inlaid with turquoise: two kneeling men offering sacrifice with a vessel between them. There is also

on the other side an indistinct character inlaid with turquoise. The surface is heavily incrusted with green and shows clear traces of cloth on either side. Technique: *cire perdue*. After the wax mould had been cast, incisions were made in it to receive the turquoise ornaments. L. 255 mm. Th. at the edge 2 mm., in the middle 4 mm. Stated to be from An Yang. Property of M. F. E. A.

Fig. 3. (K. 11035: 100.) Bronze dagger-axe, *Ko*, probably a ritual object, as it is too thin to have been of any practical use. In spite of the thinness of the material, it was evidently made in a double, permanent clay mould, which has manifestly shifted and the joints of which are clearly visible on the edges. The tang is in the shape of a decorative dagger-haft. It has the form of a birdlike monster with a coiled-up tail and a beak, one large eye and a divided crest. The decoration is the same on both sides. On the base of the tang are incrusted wood fibres, which show that the haft went right across the tang at right angles to the blade. L. 278 mm. Thickness of the blade at the edge 1 mm., in the middle 2 mm. Green and red incrustation. Property of M. F. E. A. Stated to be from An Yang.

PLATE VII.

YIN STYLE.

Fig. 1. (K. 11090: 36.) Ceremonial axe with long tang and curved unsymmetrical edge. The technique is somewhat difficult to judge; most probably, however, it was made in a double permanent clay mould. The bronze has been polished after completion. Decoration in low and flat relief: on the blade, a frieze of circles above and a border of triangles below; on the tang a *t'ao t'ieh*. The same decoration on both sides. Remains of a wooden haft affixed right across the base of the tang and parallel to the upper edge of the blade. There are remnants of cloth of at least two different qualities on the lower half of the blade. Greyish patination with red and green patches. L. 215 mm. Stated to come from An Yang. Property of M. F. E. A.

Fig. 2. (E. H.) Bronze ceremonial spade. Technique: *cire perdue*. The decoration is of a very archaic character and is the same on both sides. The socketed haft decorated on either side with engraved cicadas. On the spade is an engraved *t'ao t'ieh* and beneath it a border of triangular elements. Green patination with thick patches of verdigris. Stated to have been found at Chin Tsun, E. of Loyang. L. 157 mm. Property of Dr. E. Hultmark.

Fig. 3. (K. 11090: 37.) Broad-bladed bronze axe, hafted as that in fig. 1. On either side of the tang are rectangular *t'ao t'ieh* masks for turquoise inlay (the stones have now disappeared). Technique: *cire perdue*. Heavy green and blue incrustations over the entire surface. Oxidized right through. L. 185 mm. Stated to come from An Yang. Property of M. F. E. A.

PLATE VIII.

YIN-CHOU STYLE.

(K. 11276: 71.) Large ceremonial vessel, Ting. Round the top of the vessel is a brim, from which rise two thick, high handles. The three legs terminate at the bottom in hemispheres in the middle of the flat basal surfaces. Technique: cire perdue. The shape of the vessel is very clumsy, with strongly pronounced ornamentation and high ridges. Below the brim runs a broad frieze, divided by high ridges into six panels, in each of which is a kuei dragon. The dragons are turned towards one another, in pairs forming a t'ao t'ieh extended outwards to the sides. Below the frieze is a border of scutiform decorative elements. At the top of each leg is a t'ao t'ieh with a square in the forehead, and cleft by a high ridge into two short kuei dragons with open toothed jaws and coiled back. Height with the handles 380 mm. Green and violet patination. Property of M. F. E. A.

PLATE IX.

YIN-CHOU STYLE.

Ceremonial vessel for sacrificial wine, Ku. On the foot between the four upright and rhythmized vertical ridges are four very highly conventionalized kuei dragons, all turned in the same direction with their tails up and their heads down. Exceptionally in this case they do not form in pairs a t'ao t'ieh. On the short stem between its four vertical ridges are four more distinctly shaped kuei, turned in opposite directions and forming in pairs t'ao t'ieh masks. On the chalice are four high pointed calyx leaves, possibly highly conventionalized cicada patterns. Technique: early cire perdue. The mould for the wax model was fashioned in two vertical halves. On the inner side of the foot three characters stamped in the wax mould. H. 265 mm. Property of Kunstdindustrimuseum, Copenhagen.

PLATE X.

YIN-CHOU STYLE.

Fig. 1. (A. H. 117.) Bronze tripod of the Li type, technique cire perdue. On the body are three bull's heads with a square in the forehead and short, thick, straight horns. Green and blue incrustations. H. 185 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 2. (H. R. H. 824.) Bronze tripod, Ting type. Technique: cire perdue. The tripod is strictly speaking intermediate between the Li and Ting types, the three mouldings of the Li type being clearly distinguishable. The decoration consists of a frieze with highly conventionalized, sloping cicada patterns at the top, and below it three likewise highly conventionalized ox-heads with practically hori-

zontal, straight, short horns, on the base of which is a spiral decoration. This bronze is of a very strong Yin character. Green incrustation with blue spots here and there. H. with the handles 208 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XI.

YIN-CHOU STYLE.

Fig. 1. Ceremonial bronze vessel of the Yi type. Technique: cire perdue. On the handles is still preserved some of the clay core, appearing as a broad band on the inside of the ring. On the body are two kuei dragons with long erect conical teeth in the jaws and huge hemispherical eyes. Together with a central ornament they form a t'ao t'ieh extended out towards the sides. This t'ao t'ieh has in its forehead a smaller animal's head with large pointed ears. On the pedestal ring is a kuei frieze. Two animal heads at the top of the handles. The design is powerful and strongly archaic. Grey-green patination with patches of red incrustation. H. 150 mm. Property of Mr. Axel Jonsson, Gothenburg.

Fig. 2. Four-sided vessel of the Ting style standing on four straight legs and provided with two straight handles. Technique: cire perdue. There are on the bottom of the vessel broad diagonal fillets between the legs, apparently put there in order to reinforce the wax bottom during the process of casting. There is a t'ao t'ieh mask on each of the four sides. High relief with considerable variations, also erect crests. On the legs are conventionalized cicada patterns engraved on the metal. On one of the inner sides is a text. The patination is mainly ashen grey with green spots here and there. L. 213 mm. Br. 166 mm. H. 277 mm. Property of Kunstmuseum, Copenhagen.

PLATE XII.

YIN-CHOU STYLE.

(K. 11276: 176). Curiously shaped bronze piece, possibly some kind of fitting for a vehicle. It consists of an obverse, lower portion resembling a cuff, and a front upper portion which is flat and disc-like. Technique: cire perdue. The «cuff» and the disc were made in the wax mould separately and then welded together. These different portions of wax were cast in clay moulds without any details. After being cast the wax was modelled into the required shapes. On the cuff part is a t'ao t'ieh mask extended to the sides in somewhat high relief. This mask is divided in front into two parts, each of which forms a kuei dragon. On the upright disc is a t'ao t'ieh mask with antlers and a square in the forehead. Green incrustations over the entire surface. Oxidized throughout. Height of the cuff part 110 mm. Height of the entire piece 220 mm. Property of M. F. E. A. A similar piece is owned by Röhsska Konstslöjdऽmuseet, Gothenburg.

PLATE XIII.

YIN-CHOU STYLE.

(A. H. 137.) Large dagger-axe, Ko, of bronze. Technique: the bronze shows distinct traces of a double permanent clay mould, the higher parts of which have been filed off to a flat surface, which now recurs as the deepest flat surface of the decoration. The parts that are now raised have been cut down below the uppermost plane of the clay model, so that in the positive cast they are somewhat irregular and vague. The tang is broken off; it has two wings on the base, these wings encircling and supporting the wooden haft. On the bronze surface are traces of a thin gilding and of ornamentation in silver. For the rest the decoration is in low relief, though there are raised portions, viz. horns and fangs on a t'ao t'ieh-like head with a long beak. Dark-green patina with lighter green and brown incrustations. L. 270 mm. Br. at base 160 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XIV.

YIN-CHOU STYLE.

Fig. 1. (K. 4083.) Axe with socketed haft. The blade broad and thick. On the haft is a decoration consisting of raised mouldings over a level plane. There may possibly have existed between these mouldings a mosaic of turquoise or such-like, which has now disappeared. Technique: cire perdue. The pattern consists of a highly conventionalized ox's head with spiral horns and a square in the forehead. The decoration is similar on both sides. A greyish-green patina with greener patches. L. 135 mm. Property of M. F. E. A.

Fig. 2. (K. 11004: 9.) Socketed axe of bronze. One of the broad sides is slightly convex, the other divided into three planes and ornamented. At the top of the central, broader plane, is a t'ao t'ieh in low relief. The other two, narrower, lateral planes have cicada patterns, also in low relief. Alternate patches of greyish-green and green patina. L. 132 mm. Property of M. F. E. A.

PLATE XV.

YIN-CHOU STYLE.

Fig. 1. (K. 11004: 22—23.) The side-piece of a bronze bridle, with two cylindrical tubes running along it to secure the reins and a large hole through which to pass the bit. Further, at the top is a part like a handle. Technique: cire perdue. The bridle-piece is shaped like a kuei head with open jaws, large sharp fangs and retroussé snout. L. 65 mm. Br. 64 mm. Property of M. F. E. A.

Fig. 2. (K. 11276: 104—105.) The side-piece of a bronze bridle. At the rear are four tubes for securing the reins, and in the centre a large hole for the bit; also, at the top a part like a handle. Technique: cire perdue. This and the preceding bridle side-piece (both are in pairs) are apparently two of the earliest and most primitive pieces in the evolution of the Chinese bridle. The bronze is ornamented in somewhat high relief with the head of a kuei dragon with open jaws, large sharp teeth, a large eye, an ear and a short body. L. 84 mm. Br. 74 mm. Green incrustations. Property of M. F. E. A.

PLATE XVI.

YIN-CHOU STYLE.

Fig. 1. (K. 11000: 492.) Long bronze ornament in the form of a kuei. On the obverse side five eyelets for attachment purposes. An elegant design in low relief. Technique: cire perdue. Although in view of its kuei shape the ornament belongs to a definite group of objects — the kuei group mentioned in the text —, which otherwise is closely associated with the Yin-Chou style, yet, in view of its delicate shape, its elegant silhouette and its low, soft relief, it might possibly be dated at the period up to the Middle Chou. Greyish-green patina, smooth and shiny in spots. L. 286 mm. Property of M. F. E. A.

Fig. 2. (K. M: A. 20: 1919.) Small four-sided terminal moulding. Shiny bronze with an artificial black patina. The section is trapezoidal. Of the four sides only one is unornamented. In the unornamented side is a round aperture, in the opposite side a square aperture. The relief is low and flat. Technique: cire perdue. The ornamentation was executed in the completed wax mould and not incised afterwards. It is easy to discern through a magnifying glass how the wax model has been worked with a pointed instrument in order to shape the high ridges in the ornamentation. The bottom of the furrows is extremely uneven. The purpose of the terminal ornament is unknown. L. 123 mm. Property of the Kunstdindustrimuseum, Copenhagen.

Fig. 3. (N. M. 25: 1919.) Small foursided terminal ornament similar in shape, section, patination, execution and technique to the preceding piece. The relief is somewhat higher on two sides, on the third side being similar to that in the previous case. Presumably these two ornaments belong to a relatively late period of the Chou era. Their delicate form is reminiscent of that of the ornament described under fig. 1. L. 147 mm. Property of National Museum, Stockholm.

Fig. 4. (K. 11000: 447.) Bronze mounting, its use unknown — presumably on a vehicle or harness. It consists of a long, narrow disc with a piece taken out of the middle, bounded by a shorter part projecting from the disc at right angles and divided into one broad central field and two narrow lateral fields. The mounting is ornamented with two kuei on the long disc and a highly conven-

tionalized t'ao t'ieh extending out towards the sides and having an ox-like nose and a square in the forehead. Technique: cire perdue. A natural and fairly thin patina with green and red patches. L. 289 mm. Property of M. F. E. A.

Fig. 5. (K. 11000: 448.) A scutiform or leaf-shaped bronze mounting, on the obverse side an eyelet for the purpose of attachment. Technique: cire perdue. Greyish-green patina. L. 170 mm. Property of the M. F. E. A.

Fig. 6. (K. 11090: 166.) Rattle of bronze, presumably the top of a staff or possibly of a piece of harness. The bell consists of a lower portion square in section, so that the object could be fitted on to a wooden staff; a middle stem-part, constructed like a pyramid, i. e. in terraces. (The object has been joined together at this point in more recent times, having apparently been broken; the break was subsequently polished smooth and the parts put together again. The patination on the two parts is however so similar that there can be no doubt whatever that the parts belong to one another.) The topmost part consists of a circular disc, which is perforated, and in the centre of it is a sphere to enclose the tinkling ball. This sphere is also made of perforated work. The base portion is decorated on all four sides with a highly simplified kuei executed in low relief. The top part doubtless symbolizes the disc of the sun. (See Karlgren; Some fecundity symbols in ancient China: Bulletin No. 2, The Museum of Far Eastern Antiquities, Stockholm.) Technique: cire perdue. The ball-clapper was presumably cast prior to the modelling of the wax mould and then fixed into place in the latter. Rough green patina. The bronze is oxidized right through. H. 200 mm. Property of M. F. E. A.

Fig. 7. (K. 11092: 10.) Dagger-axe, Ko, with a triangular tang and unsymmetrical blade, in which is a large round hole and, at the base, two smaller holes for securing the handle. Technique: double permanent clay mould. On either side of the blade is a decoration in low relief: a kuei dragon with coiled-up tail and open jaws. On the tang is a small panel containing a spiral pattern. The decorative details of the clay mould appear to have been done with a stamp. Green and greyish-green patina. L. 210 mm. Property of M. F. E. A.

PLATE XVII.

MIDDLE CHOU STYLE.

Ceremonial vessel of bronze, Tui. According to Chinese traditions, the vessel was used for sacrificial bread-corn. It is provided with a lid and has two diametrically opposed handles and a circular foot. Technique: cire perdue. The style is typical Middle Chou with, on the whole, a smooth body and the décor executed in relatively narrow, horizontal zones in low relief, with raised portions only here and there, e. g. for eyes and animal masks. Typical features, too, are the low, horizontal lines of the foot and the gentle curve of the handles. When the lid is in place the body has a bulbous form, and the lid fits into a groove

round the top of the bowl, so that the profile of the whole is not broken at the join. The lid itself can be used as a low bowl and has a small circular foot at the top, which at the same time serves as a handle. Round the bottom of the lid is a decoration consisting of a band of kuei motifs repeated eight times. The conventionalism of the design is carried to extremes, and apart from the eye there are no longer any naturalistic details observable. Around the top of the body is a similar decoration: a band of eight kuei. In two places these are separated by heads of beasts of prey in high relief. Both on the inside of the lid and on the bottom of the vessel is a Chou inscription. The surface is in part shiny and grey, and in part encrusted with patches of green malachite. On the inside of the lid is a thick green malachite patina. Round the edges of the lid are patches of blue spots. H. with lid 195 mm. Property of Mr. Ernst Trygger, Stockholm.

PLATE XVIII.

MIDDLE CHOU STYLE.

(K. M. 24:1929, B.) Ceremonial bronze wine-jar, according to the traditional nomenclature called Tsun, according to modern nomenclature (Jung Keng, Yetts) Ku. On the central belt of the body are two t'ao t'ieh masks in fairly high relief extending outwards to the sides. No inscriptions. Technique: cire perdue. On the underside of the bottom are impressions in the bronze of the fine textile net with the aid of which the bottom plate was drawn up into position in the wax cylinder. The upper portion of this textile net was probably removed by being baked in under the layer of wax shaping the upper surface of the bottom. The actual t'ao t'ieh masks still retain something of the Yin-Chou style's archaic features, but the vessel's soft silhouette, large undecorated panels, simple horizontal lines and lack of raised, vertical ridges, all point to the probability of its belonging to the Middle Chou style. Within that style it is best referred to the special group that possesses a high and, on the whole, varied relief. The patination consists of green and red patches. H. 254 mm. Property of the Kunstmuseum, Copenhagen.

PLATE XIX.

MIDDLE CHOU STYLE.

Fig. 1. (K. 11000:498.) Large bronze jug. Ceremonial vessel on four feet. Technique: cire perdue. The casting is rough. On the inside of the handle the core is revealed through a broad band. The most conspicuous decoration consists of horizontal godrooned rings on the lower part of the body. The handle terminates at the top in the head of a monster with retroussé snout, large eyes and horns twisted in a snail-like spiral. Round the top of the body is a border of

highly conventionalized patterns in which the animal motif is entirely absent. This border is executed in low relief with a flat surface. The vessel belongs to the special style group, the characteristic feature in the décor of which is in fact a flat, low relief. Dark green patination with brownish patches. L. 340 mm. Property of M. F. E. A.

Fig. 2. (H. R. H. 932.) Ceremonial vessel of bronze, tripod, Ting. Technique: cire perdue. The wax models of the legs were cast in two halves in a permanent mould. The decoration is executed in fairly low and quite flat relief, being composed of two horizontal zones on the body and bands bordering the two sturdy, upright handles, which are attached to a horizontal brim round the mouth. The two horizontal ornamental bands are separated by a narrow zone formed by a raised horizontal line. The decoration consists of highly conventional patterns, the animal character of which is hardly distinguishable, though more so on the lower than on the upper band. In both cases the decorative elements apparently consist of kuei. The style is very pure, and is in certain respects clearly associated with the Huai decorative style. The ground surface of the relief consists of a slightly convex plane. The patterns are made on the wax model by means of broad concave dies, the upper containing four kuei and the lower ones containing six. On the underside openings for the castings are clearly visible in the form of filed-off projections. The deeper parts of the decoration have been smeared with a black paste in order that the patterns may show up against a clear background. Remnants of this paste are still preserved. The bronze has a beautiful brownish-green water patina. Its height, including the handles, is 250 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XX.

MIDDLE CHOU STYLE.

Bronze buffalo with an opening shaped like a bottle-neck in the middle of the back. Beneath the belly and along the legs, however, the figure is open. Technique: cire perdue. As a work of art this bronze buffalo is characterized by a primitive, clumsy and naive naturalism. The conventionalism of certain individual parts is however still preserved. It is particularly far-fetched in the head and the thighs, the latter being fashioned in the form of snail-like spirals. Dark-brown, shiny patina, with patches of green here and there. L. 250 mm. Property of the Kunstmuseum, Copenhagen.

PLATE XXI.

MIDDLE CHOU STYLE.

Fig. 1. Ceremonial bronze vessel, Tui or Chiu, on a high circular foot and having two diametrically opposed handles. Technique: cire perdue. The vessel

is typical of the Middle Chou period. The decoration is in somewhat flat relief with raised portions, such as eyes and animal masks. Large undecorated surfaces predominate on the vessel, and the silhouette shows a gentle curve. The tops of the handles are in the form of hare-like heads. The decorative bands contain highly conventionalized kuei, in which the naturalized details, except the eyes, have disappeared. Exactly between the handles, on the upper band, are the masks of beasts of prey in fairly high relief. Bluish-grey water-patina with green and red patches. H. 135 mm. Property of Director A. Jonsson, Göteborg.

Fig. 2. (A. H. 122.) Ceremonial bronze vessel, Tui or Chiu, on a high ring-foot and provided with two diametrically opposed handles. Technique: cire perdue. The handles are not solid. The burnt core of clay crops out as a broad band along the back of the handles. The vessel is decorated with two bands in low relief, the one on the upper half of the body, the other on the ring-foot. On these bands are circles containing spirals and alternating with highly conventionalized kuei. At the top of the handles are heads resembling those of hares. The style is typical Middle Chou. The patination is greyish-green, smooth, shiny in parts and with patches of somewhat variegated colour. H. 137 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XXII.

MIDDLE CHOU STYLE.

Fig. 1. (A. H. 903.) Ceremonial bronze vessel of the Ku type. Technique: cire perdue. The bottom was impressed with its lower part into the wax model, the upper part being fixed into position above the high ring-shaped foot by means of a cross formed of two strings, detailed impressions of which have been cast in the bronze. The decoration consists of simple linear elements in low relief, the whole now much decomposed: on the body and foot and the lower part of the collar are kuei and t'ao t'ieh, on the trumpet-shaped upper part of the collar are cicadas. Exquisitely soft greyish-green patina with brown and green patches. H. 244 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 2. (A. H. 902.) Ceremonial bronze vessel, Chi. Technique: cire perdue. Ring-shaped foot. The body has a gentle curve, the lower part slightly bulbous. Decoration on the collar: below, a border divided into panels in which are highly conventional bird motifs; above, cicada motifs. A soft greyish-green patina. H. 192 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XXIII.

MIDDLE CHOU STYLE.

Fig. 1. (K. 11276:83.) Bronze cylinder, possibly the tip of a staff or an axle-cap. On one side of the cylinder are two square windows, on the opposite side

are round windows to match. Technique: cire perdue. The decoration is geometrical throughout and entirely without any animal character. The style is pure and simple and the design finely proportioned. The workmanship, however, is somewhat crude. Greyish-green water-patina. H. 110 mm. Property of M. F. E. A.

Fig. 2. Bronze axle-cap. On each side of the cap, at the bottom, is a rectangular aperture, the two apertures matching one another. Technique: cire perdue. The decoration is geometrical throughout and is executed in low relief with a level surface. On the circular upper surface of the cap is a rosette in spiral design. Brown patination with green patches. H. 102 mm.

Fig. 3. (N. M. 91: 1920.) Fragment of a bronze handle terminating in a broad monster's head with retroussé snout. The actual handle-grip is shaped like a neck, which is scaly at the top and divided into five plane surfaces. The underside is arched and not decorated. Technique: cire perdue with a core of sand. Patination dark green and dark brownish-red patches. L. 147 mm. Another similar fragment is 103 mm. long. Both the property of the Nationalmuseum, Stockholm.

Fig. 4. (N. M. 65: 1920.) Fragment of a bronze handle in the shape of a bull-like monster's head with retroussé muzzle and three high ridges on the top of the neck. The grip-portion projecting from the mouth has flat sides with decoration in low, flat relief. Technique: cire perdue with a core of sand. The bronze is roughly polished and the metal red. The patination is variedly brown and green. Length of the fragment 88 mm. Property of the Nationalmuseum, Stockholm.

Fig. 5. (K. 11055: 27.) A T-shaped hollow bronze mounting with smooth sides and rectangular sections. It may possibly have formed part of a vehicle's trappings. Technique: cire perdue. The two T-shaped surfaces have the same decoration in low, flat relief. From one of the T-surfaces projects a ring. The pattern: highly conventionalized kuei, whose eyes, horns and open jaws, with protruding tongue, are still distinguishable. Greyish-green, natural patina. L. 193 mm. Property of M. F. E. A.

Fig. 6. (K. 11090: 147.) Oblong bronze mounting, possibly belonging to a piece of harness. Technique: cire perdue. Decoration in low, flat relief, entirely geometrized. Seven eyelets on the back for attaching the piece to the harness. For the rest, the bronze is pierced in four places with apertures, which were likewise apparently used for attachment purposes. Greyish-green patina. L. 265 mm. Property of M. F. E. A.

PLATE XXIV.

MIDDLE CHOU STYLE.

Fig. 1. (A. H. 898.) Cruciform tubular bronze piece consisting of a middle portion in the form of a recumbent ox with uplifted neck, and four separate tubular side-pieces. Technique: cire perdue. The middle portion is executed in

perforated work. It was evidently attached to the side-pieces by tubes or straps of some more perishable material. The side-pieces terminate in animal heads with short erect ears. The sides of these heads are pierced with holes, into which are fitted rings cast in a double permanent clay mould. The rings had evidently been already cast prior to the casting of the tubes and were welded into place in the wax model. The patina consists of green and blue incrustations. Height of the middle section 67 mm. Br. 67 mm. Length of the side-pieces 80—95 mm. Use of the object unknown. Property of Mr. Anders Hellström, Mölndal.

Fig. 2. (K. 11276: 75.) Small bronze scutiform mounting with two rods at the back for fixing the object to some sort of base. Perforated work in fairly high relief. Technique: cire perdue. On the upper and middle portion is an ox's head with spiral horns and retroussé muzzle. The patina varies between grey and green. L. 63 mm. Property of M. F. E. A.

Fig. 3. (K. 11276: 80.) A cruciform object in bronze, with four tubular side-openings and a large hole underneath. The upper side is in the shape of an ox's head with spiral horns. Technique: cire perdue. Greenish-yellow patina with a metallic shine, possibly a thin coating of metal and green patches of malachite. L. 34 mm. Property of M. F. E. A.

Fig. 4. (H. R. H. 775.) Small bronze object, apparently the end of the handle of a weapon. Technique: cire perdue. The piece very closely resembles the heads of some extremely richly designed representations of demons in typical Middle Chou style (one of them is reproduced here as Pl. XXV), which were evidently used as the handles of weapons. On this head can be distinguished the eye in the centre of the forehead, the ear placed on the left, and on the right a projection in the shape of a nose. In this case, of course, the head is very highly conventionalized. A natural red and green patina on a greyish, somewhat smooth ground, with slight traces of gilding. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. (K. 11276: 76.) Flat, round metal disc shaped like a dragon. A piece of perforated work, done probably in a permanent mould. The decoration is in low, flat relief. Greyish-green patina with patches of brighter green incrustations. Br. 47 mm. Property of M. F. E. A.

PLATE XXV.

MIDDLE CHOU STYLE.

(H. R. H. 1075.) Representation of a demon in bronze, terminating in a short rod for keeping the object in plate. It is apparently the handle of a weapon of some kind. This oblong object, which has a rich profile, can be grasped very firmly and securely in the hand. Technique: cire perdue. The piece is very richly designed and its silhouette assumes a complicated curve. The demon has large protruding eyes, a retroussé nose, a broad horizontal mouth and clearly defined

ears. The arm is jointed and terminates on both sides in spirals. Behind the stomach is a pair of short wings and on the front of the stomach is an ox's head in low relief. The fundament is likewise provided with a pair of wings and terminates in a coiled tail. The legs are in a sitting posture, the knees drawn up, and end in bird's claws. The expression is extremely fearsome. The style has certain associations with the styles found in the South Sea Islands in representations of demons and totems. The bronze has a shiny grey patina with, here and there, traces of gilding and various-sized patches of malachite incrustations. L. 167 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XXVI.

MIDDLE CHOU STYLE.

Fig. 1. (K. 11071: 53.) Bronze mounting, possibly a panache on a horse's harness. Technique: cire perdue. A thin piece of sheet bronze which has been shaped to the design. On the under-side are three rods for fastening the mounting, also four ridges, the marks left by rods used for supporting the wax model. On the front are two ox-heads in half-relief. Green patina. H. 187 mm. Property of M. F. E. A.

Fig. 2. Bronze mounting for a piece of harness, probably a forehead-ornament. Technique: cire perdue. It has three rods on the back. Green and blue patina. L. 335 mm. Property of Mr. A. Lundgren, Stockholm.

Fig. 3. (K. 11071: 56.) Bronze mounting similar to the preceding piece. Technique: cire perdue. On the under-side are two rods for fixing the piece in position. Green patina. L. 275 mm. Property of M. F. E. A.

Fig. 4. (A. H. 695.) Bronze bridle piece (a pair). In the centre a round hole and an ear-shaped handle. On the back are two short adjacent half-tubes. Technique: cire perdue. A greyish-green smooth surface with small blue and green incrustations. Dimensions 90  $\times$  110 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 5. (A. H. 737.) Crescent-shaped side-piece belonging to a bronze bridle (a pair). On the back are two half-tubes for attaching the reins. Green patina. Dimensions 95  $\times$  80 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XXVII.

HUAI STYLE.

Bronze bell, Chung, of an impressive and exquisite design. Technique: cire perdue. The bell is crowned at the top with a heraldic group consisting of two four-footed beasts, possibly tigers, joined together by a serpentine dragon with a forked tail. On the upper surface of the bell are two crescent-shaped

panels decorated with interwoven double dragons. The body of the bell is divided into two similar sides, which meet one another at an obtuse angle. At the bottom of these sides is a richly designed t'ao t'ieh mask, extended horizontally and divided into two double dragons. Above this decoration, on either side, is a surface divided by plaited bands into rectangular panels. These latter are decorated alternately with large hemispherical bosses and arabesques consisting of draconic elements in half-relief. The middle panel on either side is smooth. There are altogether 36 bosses. The decoration has a marked Huai character. Technically, the workmanship is extremely skilful. The bronze is beautifully finished and the effect highly decorative. The patination is dark brown, with incrustations of dark-green malachite. Height from edge to edge 540 mm. Height of handle on the top of the bell 130 mm. The bell, which is owned by M. F. E. A. is the gift of Emil Hultmark, Ph. D. (For further details see Otto Kümmel: Chinesische Kunst, Berlin 1930, Tafel 25.)

## PLATE XXVIII.

## HUAI STYLE.

(K. 11276: 72.) Bell or gong, Chung, of bronze; belonging to the baluster-shaped type. On the flat upper-side is a handle in the shape of a lion. Technique: cire perdue. The wax mould was cast in two halves, together forming the external sides of the body and the upper collar-shaped terminal part. The wax mould was then made complete with the addition of the flat upper part. The lion was modelled separately and then affixed to the bell. On the flat part are three long, narrow pegs, remains of the casting.

The decoration, which consists of a filigree ground pattern and a number of large circular surfaces, was impressed into the wax by means of stamps, probably before the two wax halves were welded together. The interior of the wax model was smoothed over with care, whereas the sutures on the exterior are very clearly visible. Their retention was necessitated by the decoration that had already been impressed in the wax. The ornamentation consists at the top of a broad border composed of a network of fine spiral meanders. At the rounded corners (the bell is somewhat square in section), on all four sides, are large decorative circular areas, in the centre of which is a complicated spiral pattern and round their peripheries a band of plaited work. In the middle section of the body, on each of the two broad sides, is a circle having a spiral movement on a border of plaited work. The spiral ornamentation is full of dots. The decoration terminates at the bottom in a broad border composed of a number of horizontal bands. At the top it starts with a narrow band of kuei, in the middle of which is a complicated geometrical pattern, akin to that on certain Huai mirrors, and the whole design terminates at the bottom in two horizontal cords done in relief. All the details mentioned

here represent the most typical decorative features of the Huai style. Greyish-green patina with blue and brown patches. The bell is stated to have been dug up at Changsha. Height from the bottom edge to the brim of the collar 375 mm. The lion rises to a height of about 33 mm. above this plane. The bell is the property of M. F. E. A.

PLATE XXIX.

HUAI STYLE.

(H. R. H. 926.) Bronze vessel, *Hu*, with pedestal ring, high neck and two handles in the form of movable rings suspended from *t'ao t'ieh* masks. Technique: *cire perdue*. Technically the workmanship is exquisite. On the pedestal ring is a pattern in low relief. On the body are two decorative zones, likewise in low, flat relief. These bands are surrounded by horizontal godrooned rings. The vessel is a severe example of the pure Huai style, which is specially conspicuous in the two *t'ao t'ieh* masks executed in half-relief and in a profusion of spirals. Dark greyish-green patination and a dull surface. H. 310 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XXX.

HUAI STYLE.

Fig. 1. Fairly low bronze urn with high pedestal ring, no handles and a high neck. Technique: *cire perdue*. Some of the enveloping clay core on the underside of the foot has been allowed to remain undisturbed. On the whole the design has been very much influenced by the technique of ceramics. The decoration is divided into zones, which are bounded by somewhat flat and narrow horizontal godroons. It has been executed by incisions in the wax model, and it is possible that these incisions were subsequently supplemented and finished in the completed bronze. The results is that the pattern takes the form of depressions in the otherwise flat surface of the vessel. The broader parts of this sunken decoration contain a turquoise inlay consisting of minute turquoise chips. The ornamentation consists of highly conventionalized animal or purely geometrical elements. Smooth, greyish-green water-patina. H. 208 mm. Property of Mr. Carl Kempe, Stockholm.

Fig. 2. Bronze vessel, a double *Tou*, of a rare shape. Technique: *cire perdue*. On the horizontal panels are broad friezes of highly conventionalized dragons. The actual form of the vessels is strongly stereometrical and in sharp contrast to the form-conception of the Chou dynasty. The patterns are done in low, flat relief. They have been stamped into the wax model by means of dies. The surface is covered with green, blue and red incrustations. Combined height of the vessel 350 mm. Property of Mr. G. Werner, Gothenburg.

PLATE XXXI.

HUAI STYLE.

Fig. I. (K. 11090: 170.) Low bronze bowl on a high annular foot and having two sturdy handles attached just below the brim of the mouth. The shape is exquisitely beautiful, simple and pure, having a gentle curve reminiscent almost of Greek forms of bronze vessels. Technique: cire perdue. Between the sides of the ring-foot the thin bottom of the bowl shows three ridges, which meet in the centre and represent casts of the bars used for supporting the wax model. On the inner sides of the foot are observable remnants of the surrounding clay core. The handles are open on the insides and likewise reveal remains of the clay core. The decoration on the vessel was done by means of stamps in the wax model. The pattern consists of dragons and monsters, the upper side of the handles also being decorated in very low relief with t'ao t'ieh masks. A radical feature of this decoration is its abundant dots and its arabesque-like interwoven lines. Both the pattern and the form of the vessel, particularly the shape of the handles, are very closely akin to those of the next vessel (fig. 2). Natural, greyish-green patina. Height from the under edge of the foot to the upper edge of the brim 116 mm. Height of the handles above the edge of the brim 30 mm. Diam. of the mouth, including the brim, 360 mm. Property of M. F. E. A.

Fig. 2. Bronze vessel, tripod, Ting. The vessel stands on short, heavy feet and has beautifully shaped handles of considerable breadth and a lid shaped like a skull-cap with three fixed handle-rings (feet). Technique: cire perdue. The pattern on the body was executed in the wax core by means of stamps, while the pattern on the feet and handles was incised in the wax model by hand. The stamps were not very carefully applied. The vessel's design is vigorous and heavy, although its curves are gentle and harmonious. In view of its draconic meanders, its rich spirals, its dots and grooved bands, the decoration must be ascribed to the Huai style. As regards the form of the vessel, however, we find the design still preserved in the Han dynasty; it exists, for instance, in a vessel dated 15 B. C., which was exhibited in Cologne in 1926. The resemblance between the vessel illustrated here and that shown at the Cologne Exhibition (see *Asiatische Kunst-Ausstellung, Köln 1926, Tafel 40, Fig. 2*) is not perfect, it is true, but it is nevertheless quite evident. According to Pelliot, there is no doubt about the date. Whether this resemblance is to be explained as a survival of the design as late as the Han dynasty, or may be by the possibility that in certain localities the Huai decorations and forms were cultivated right into the Han dynasty, it is difficult to decide. Greyish-green patina, with coarse green and red incrustations. Breadth between the upper edges of the handles 347 mm. H. 265 mm. Property of Mr. Axel Jonsson, Gothenburg.

PLATE XXXII.

HUAI STYLE.

Fig. 1. (A. H. 884.) Bronze bowl with thin walls and two ring-shaped handles. Technique: cire perdue. On the inside the marks made when the handles were affixed are still visible, though they are probably impressions of the wax model. The decoration consists of a broad serpentine frieze on a dotted background, and was done on the wax model by means of stamps. On the under-side there are clearly visible, forming a narrow edge, remnants of the casting. Grey patina with green and blue patches. H. 60 mm. L. 131 mm. Br. 113 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 2. (A. H. 798.) Large cylindrical bronze mounting, possibly an axle-cap. Technique: cire perdue. The upper and broader frieze on the exterior is done in low relief and impressed into the wax model by means of a stamp, of which entire impressions could be taken round the surface of the cylinder five times in a clockwise direction; the sixth time there was room for only half the stamp. Natural patina with green and red patches. H. 100 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XXXIII.

HUAI STYLE.

(K. 11278:25.) A smallish bronze bowl on a low ring-foot. It has two handles, and the top portion consists of a low neck. There may have been a lid, as the neck terminates at the bottom in a horizontal groove. Technique: cire perdue. On the under-side, inside the ring of the foot, can be seen very distinctly the smears made by the fingers in the wax and now cast in detail in the bronze. The decoration has been executed with extreme care, not to say fastidiousness, and consists of horizontal bands of finely detailed dragon pattern on a granulated background. Ears, eyes, claws and wings, also muzzle-like parts, can be distinguished, but the details are not combined to form organic units. Two such bands are separated by a plaited pattern in somewhat low relief. There is also a plaited border on the upper part of the ring-foot. On the short neck is a pattern consisting of three bands of arrow-heads, impressed into the wax model by means of stamps, the edges of which are easily discernible. Compared with the rest of the decoration, that on the handles is clumsily and unevenly incised. There are traces of a very thin fired gilding on the surface of the bronze. The Huai style has here reached the height of preciousness and minutely detailed expression. The style exhibited in this vessel almost attains to the decorative style achieved in silversmith's work during the Tang dynasty. A beautiful variegated silver-and-gold patina with green malachite incrustations. H. 105 mm. Diam. of the mouth 170 mm. Property of M. F. E. A.

PLATE XXXIV.

HUAI STYLE.

(A. H. 904.) Bronze tiger, couchant. Technique: cire perdue. The design is forceful and energetic, clearly an original work by an artist with a strong personality. The head is particularly finely done. On the body is a pattern consisting of spiral elements in patches, made by incisions in the wax model, the markings on the completed bronze being then filled in with chased lines of some other material, probably some metal alloy. The appearance of the belly of the tiger affords evidence that the figurine was probably one of the details of a larger bronze piece, from which it has since been broken off. The piece comes from Chin Tsun, Loyang. It is reported that three similar gilded bronze animals were found together. One of these was acquired by Mr. Anders Hellström, Mölndal, a second has been in the possession of Mr. C. T. Loo, Paris. Greyish green water-patina, partially coated with green malachite incrustations. L. 164 mm. H. 105 mm.

PLATE XXXV.

HUAI STYLE.

Fig. 1. (K. 11000: 397.) Fragment of a bronze vase with a spiral pattern done in fine detail. Technique: cire perdue. The detailed work is executed with minute care and distinctness and with exquisite skill. Greyish-green water-patina. L. 85 mm. Property of M. F. E. A.

Fig. 2. (K. 11000: 441.) Fragment of the top part of a bronze mounting on a metal bar, possibly part of the appointments of a vehicle. Technique: cire perdue. The piece is in typical Huai style, with fine details executed in high relief, the whole combining to form a t'ao t'ieh or the head of a serpentine dragon. Greyish-green patina. The fragment is about 100 mm. long. Property of M. F. E. A.

Fig. 3. (H. R. H. 989.) Head of a bronze dragon. Fragment forming part of the Li-Yü finds. Green and red incrustations. L. 60 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 4. (H. R. H. 993.) Bronze foot. Fragment, part of the Li-Yü finds. Traces of gilding. H. 70 mm. Brown patina. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. (H. R. H. 992.) Bronze fragment. Part of a lid discovered amongst the Li Yü finds. L. 145 mm. Natural patina with red and green patches. Property of H. R. H. the Crown Prince of Sweden.

Fig. 6. (H. R. H. 991.) Bronze fragment of the edge of bowl, found on the Li Yü site. Natural patina in green and red. L. 160 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XXXVI.

HUAI STYLE.

Fig. 1. (K. 11033: 63.) Fragment of a handle from a fairly large bronze object. The fragment is in the shape of a four-legged dragon, the body curved like an S, and with a large head and huge horns or ears. Technique: cire perdue. The hind part of the animal is likewise in the shape of a two-legged animal with large ears, open jaws and retroussé muzzle. On the ears and forehead of the larger animal there are small nipple-shaped rings inlaid with turquoises, as were originally also the eyes. The pupils of the rear animal's eyes were originally made of gold. The style can scarcely be called a markedly Huai style. The object should possibly be dated later. Dark brownish patina. L. 130 mm. Property of M. F. E. A.

Fig. 2. A »Ko« handle. Technique: cire perdue. The principal motif consists of a sitting bird. Water patina. The original length of the handle was about 110 mm. Property of Mr. A. Hellström, Mölndal.

Fig. 3. A »Ko« handle of unusual length, narrow and pointed. Technique: cire perdue. The principal décor consists of a sitting bird. Water patina. L. 183 mm. Property of H. R. H. the Crown Prince of Sweden. Both these last-mentioned handles, with their bird motif, their end portions divided into several planes, and their marked water-patina, belonging to a geographically well-defined group of objects. Most of them come from Shouchou, where evidently bronzes were manufactured on a large scale as a specialized product. They often possess a manifestly Huai style, though in some cases it is more closely akin to the Han style.

Fig. 4. (H. R. H. 998.) A »Ko« handle of bronze. Technique: cire perdue. Richly decorated. The principal motif, done in fine detail, consists of a fantastically designed quadruped with a high horn in its forehead. Head and tail are executed in high relief and form details in the handle's profile. The body and legs, on the other hand, are incorporated in the middle section of the handle and are executed in low relief. This animal representation is surrounded with a pattern in low relief, consisting for the most part of horizontal bands decorated with dots, cowries or meanders. Brown patina. H. 80 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. (K. 11276: 146—147.) Axle-cap with pin, both of bronze. The cap is open at top and bottom. Technique: cire perdue. The wax model of the pin, except for the head, was apparently made in a double permanent clay mould. The decoration in the wax was done with the aid of stamps. The pattern on the cap is divided into two horizontal belts bounded by narrower horizontal bands, and consists of a degenerate, finely detailed dragon motif on a granulated ground of precisely the same kind as on the vessel shown in Pl. XXXIII. The narrower bands are made up of continuous spiral patterns or continuous arrow-head ornamentation. On one side there is at the top a small projection in the shape of a sitting bird in high relief. The pin terminates in a head of a serpentine

character with granulated dotted surface and retroussé nose. Green malachite patina with patches of blue. H. 74 mm. Property of M. F. E. A.

Fig. 6. Axe-cap of bronze. It is closed at the top and has a rich profile. There is a pin attached to it. Technique: cire perdue. The ornamentation was evidently incised into the wax by hand. Water patina. Probably from Shouchou. H. 80 mm. Property of the Nationalmuseum, Stockholm.

PLATE XXXVII.

HUAI STYLE.

Belt-buckles (belt-hooks). Technique: cire perdue.

Fig. 1. (K. 11071: 42.) Bronze belt-buckle. T'ao t'ieh group. Probably the eyes were originally inlaid with turquoise. The top of the buckle is in the shape of a t'ao t'ieh mask with a broad, retroussé nose and side-whiskers. The hook at the end of the buckle is shaped like a narrow bird's-head. The back of the hook is prolonged and forms a thin stem, which merges into the haft of the boss. The style to a certain extent resembles the Chou style. This buckle is probably one of the earliest types so far known. Grey-blue toning into dark brown patina. L. 67 mm. Property of M. F. E. A.

Fig. 2. (K. 11090: 10.) Belt-buckle (transitional between the t'ao t'ieh group and the coiling snake group), very closely resembling the preceding one with the same technical execution and the same kind of patina. At the top of the t'ao t'ieh mask are two coiling snakes. L. 30 mm. Property of M. F. E. A.

Fig. 3. (K. 11290: 107.) Bronze belt-buckle (coiling snake group). The hook is in the shape of a short broad bird's-head. The stem is broad and thin. The boss, which has a narrow haft, is in the shape of an animal's head with spiral horns. Green patina. L. 61 mm. Property of M. F. E. A.

Fig. 4. (K. 10599: 503.) Small bronze belt-buckle (elephant head group). It is in the shape of an elephant's head with large ears and broad uplifted trunk. The head is bent backward and emerges direct into the haft attached to the very large oval boss. Early Huai type, probably from Shouchou. Water-patina. L. 35 mm. Property of M. F. E. A.

Fig. 5. (K. 11290: 105.) Small belt-buckle. The boss is small on a narrow haft of medium length. Bluish-green patina. L. 42 mm. Property of M. F. E. A.

Fig. 6. (K. 11290: 76.) Small belt-buckle of bronze. The stem is broad and thin and is rectangular in section. The body is fashioned like a tiger with its head bent back. It is encircled by a snake, which is granulated. The work is of a miniature and precious character. The stem is prolonged towards the back in the form of a thin rod, which merges into the base of the narrow boss-haft. Definitely Huai in style. Light green patina, oxidized right through. L. 65 mm. Property of M. F. E. A.

Fig. 7. (K. 11290: 77.) Small belt-buckle (elephant head group). The bent-up hook is fashioned like a broad snake's-head with its two eyes in high relief. The crown of the head is prolonged at the back by means of a band in the haft of the large boss. The piece is oxidized right through and has a light-green water-patina. L. 47 mm. Property of M. F. E. A.

Fig. 8. (K. 11290: 101.) Small belt-buckle with long stem, smooth body and a large boss with very short haft. The hook is broken off. At the back of the boss is a finely detailed representation of a bird of prey done as negative incised work. Light green water-patina. The piece is oxidized right through. Present length 57 mm. Property of M. F. E. A.

Fig. 9. Small belt-buckle of a rough shape, its stem rectangular in section. The stem merges at the back direct into the small oval boss, which has a smooth, narrow stem. The top of the buckle is in the shape of a head with a retroussé nose, a granulated forehead and, at the back, two coiling snakes. Doubtless a very early representative of the Huai style. Silver-grey patina. L. 56 mm. Property of Professor O. Sirén.

Fig. 10. Small belt-buckle (ox-head group) of bronze. The stem is long and narrow, terminating in a hook fashioned like a small bird's head. The stem is square in section. The body is in the shape of an ox's head with broad muzzle, very broad head, large eyes and short horns. The crown of the head is likewise shaped like a smaller ox's-head and is prolonged towards the back into the haft of the boss. The boss is round and unornamented. Behind the ox's head the buckle terminates in a ring round the boss-haft. The ring is ornamented with a continuous spiral. Dark green patina. L. 79 mm. Property of Professor O. Sirén.

Fig. 11. (K. 11035: 28.) Small belt-buckle (snake-dragon group), the body forming a complicated meander of snake-dragons. The hook is fashioned like a snake's head. The stem is narrow and rectangular in section. At the back it is prolonged into a broad band, which extends to the primitive boss-haft. The boss itself is small and circular. Exquisite Huai style. Light green water-patina. L. 90 mm. Property of M. F. E. A.

Fig. 12. (K. 11071: 39.) Bronze belt-buckle. Primitive type with a plain stem and a hook that is not shaped like any kind of head. The stem is rectangular in section. It is prolonged at the back through a bend in the haft of the boss. The top of the buckle is the head of a beast of prey. The patina is grey and shiny, with green malachite incrustations. L. 75 mm. Property of M. F. E. A.

PLATE XXXVIII.

BELT-BUCKLES, HUAI-HAN.

Fig. 1. (K. 11211: 69.) Belt-buckle in the shape of a bird's body. The boss is fairly large. Grey patina with green incrustations. L. 60 mm. Property of M. F. E. A.

Fig. 2. Small belt-buckle of primitive shape, its stem rectangular in section and its body fashioned like that of a bird. The stem is long, the boss small on a somewhat high haft. Grey patina with patches of green. L. 68 mm. Property of Professor O. Sirén.

Fig. 3. Small bronze belt-buckle of primitive type in the shape of a bird's body. The boss is fairly large and has a very short haft. With the buckle is a ring, which is stated to have been found in its immediate neighbourhood. Credence is lent to this statement by the fact that the patination is quite similar — alternating shiny greyish-green surfaces and thick brownish-green incrustations. L. 45 mm. Diam. of the ring 39 mm. Property of Professor O. Sirén.

Fig. 4. (K. 10599: 506.) Belt-buckle shaped like a bird with a long neck. The design is primitive. Round, short-hafted boss. Greyish patina with patches of red. L. 75 mm. Property of M. F. E. A.

Fig. 5. (K. 10600: 82.) Small belt-buckle of simple design. The back is flat. A comparatively large boss on a long haft. Light green patina. L. 40 mm. Property of M. F. E. A.

Fig. 6. (K. 11276: 128.) Bronze belt-buckle in the shape of a dolphin with tail curled upwards and the tip fashioned like the head of a snake. The back of the piece is concave. Long-hafted boss. Traces of silverplate. Green malachite patination. L. 50 mm. Property of M. F. E. A.

Fig. 7. (K. 10466.) Small belt-buckle fashioned like a bird with its head bent back. Long-hafted boss. Grey patina. L. 33 mm. Property of M. F. E. A.

Fig. 8. (K. 11033: 30.) Small belt-buckle (elephant-head group). The boss has a long haft. Dark green patina. L. 67 mm. Property of M. F. E. A.

Fig. 9. Small belt-buckle with complicated circular décor in the Huai style. Natural patina. L. 57 mm. Property of Mr. I. Traugott, Stockholm. It was acquired at Kai Feng Fu and is probably from Chin Tsun.

Fig. 10. (H. R. H. 895.) Small belt-buckle, the body fashioned like a bat with a lyre-shaped tail. The stem ends in a snake's head. Greyish-green patina. L. 70 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XXXIX.

HUAI STYLE.

Fig. 1. Circular mirror, its design, edging and patina similar to fig. 2. The pattern as well as the technique are likewise the same. Stated to have come from Chin Tsun, Loyang. Diam. 122 mm. Property of Mr. A. Lagrelius, Stockholm.

Fig. 2. (K. 11276: 120.) Square mirror of a very ancient type. One of the earliest known examples of Chinese bronze mirrors. Technique: cire perdue. On the back of the mirror is a broad, plain, undecorated, raised edge enclosing

a square field containing two t'ao t'ieh masks having the appearance of a wild boar, done in low relief with fine, fastidious details. The decoration was apparently impressed on the wax model by means of a stamp, which covers half of the decorated square field. The handle is roughly and simply made and is rectangular in section. L. 130 mm. Br. 130 mm. Silver-grey surface with green malachite incrustations. Property of M. F. E. A.

The style of this and the preceding mirror is a mixture of Chou and Huai; consequently these two pieces should probably be dated very early in the period covered by the Huai style.

PLATE XL.

HUAI STYLE.

Fig. 1. (H. R. H. 916.) Small bronze mirror. Technique: cire perdue. It is decorated in fairly high relief with four tigers round a snake-like dragon, which is placed in the centre and forms the small handle. Typical Huai style exhibiting strongly pronounced spiral movement and an abundant use of granulations. Greyish-green patina with patches of brighter green. Traces of fired gilding. Diam. 61 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (H. R. H. 1016.) Small bronze mirror decorated on the back with a complicated spiral band pattern. Around the small looped handle, in the centre, is a circular field without ornamentation and separated from the decorated part by a circular band in low relief. The decorated side has a silver-grey surface and patches of green malachite. Diam. 88 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XLI.

HUAI STYLE.

Fig. 1. (H. R. H. 1004.) Bronze mirror with pattern in low relief and a small handle. Technique: cire perdue. A stamp has been used for impressing the pattern into the wax mould. Olive-green water-patina with green malachite incrustations. Diam. 117 mm. Th. 4 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (A. L. 30, 295.) Bronze mirror with pattern in low relief. Technique: cire perdue. Surface shiny like steel with green incrustations. Diam. 122 mm. Th. 5 mm. Property of Mr. A. Lagrelius, Stockholm.

PLATE XLII.

TRANSITION STYLE HUAI-HAN.

Fig. 1. (K. 10599: 552.) Very thin bronze mirror with a flat reflecting surface and a small looped handle on the decorated side. Technique: cire perdue. An

exquisite specimen of a mirror, with finely detailed decoration. Greyish green patina. Diam. 105 mm. Property of M. F. E. A.

Fig. 2. (K. M: B. 17, 1931.) Bronze mirror decorated in low, flat relief. Technique: cire perdue. The decoration: three dragons with expressive mien and vigorous movement, on a ground of geometrical arabesques executed in fine detail. Highly accentuated granulation and abundant spiral meanders. Dark patina with patches of green. The specimen illustrated here is the property of Kunstmuseum, Copenhagen. Another specimen belongs to M. F. E. A. Its diam. is 130 mm. The Copenhagen specimen is 3.7 % larger and possesses a far more clearly defined ground decoration. Traces of the cracks in the mould observed in the Copenhagen mirror all recur as somewhat attenuated copies on the M. F. E. A. mirror. There are besides a number of fresh cracks in the latter, which do not appear on the Copenhagen mirror. The Copenhagen mirror may therefore be regarded as the original of the M. F. E. A. mirror, the wax model of which was cast in a permanent clay mould made from the Copenhagen mirror. The surface contracted as a result of the burning of the clay mould. The degree of shrinkage in the M. F. E. A. mirror corresponds to the total degree of shrinkage in both clay mould and metal. The Copenhagen mirror itself was produced by the cire perdue method. In the case of both mirrors finishing touches were given to the drawing of the dragons by hand after casting, so that the two specimens show a slight divergence in their execution.

PLATE XLIII.

HAN STYLE.

Fig. 1. (K. 11001:5.) Bronze bowl of a pure and noble design. Technique: cire perdue. The vessel stands on a low circular foot and has on two sides t'ao t'ieh masks, each with a strong loop to hold loose ring-shaped handles. These were separately cast and have a distinct suture; they were therefore passed afterwards through the loop and hammered together. Greyish green water-patina with malachite incrustations. H. 114 mm. Diam. 283 mm. Property of M. F. E. A.

Fig. 2. (K. 11001:9.) Low bowl or dish on three short legs and with diametrically opposed loops, through which are passed loose handles with a suture. Technique: cire perdue. The exterior decorated with horizontal lines in fairly high relief. Beautiful green patina. H. 130 mm. Upper diam. 320 mm. Property of M. F. E. A.

Fig. 3. (H. R. H. 412.) Low bronze dish. Technique: cire perdue. Simple, rigid profile. The wax model was cast in two halves. Green patina with darker-coloured patches. H. 80 mm. Upper diam. 343 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XLIV.

HAN STYLE.

Fig. 1. (H. R. H. 667.) Two bronze rings, forming the upper and lower linings on a cylindrical vessel, both of them richly decorated with gold and silver plate. Internal diam. of the upper ring 120 mm., that of the lower ring 119 mm. Beautiful work in the Han style. Acquired through Fredrik Martin. Property of H. R. H. the Crown Prince of Sweden.

Fig. 2. (N. M. 19. 1919.) Bronze lid. Rectangular in section. It contracts towards the top to form a part of smaller dimensions, likewise rectangular in section. The broader part has underneath it a flat bottom — obviously an improvement of later date. The exterior surface of the lid is decorated with a rich animal design in typical Han style. The ornamentation comprises draconic meanders, tigers, fishes and birds, all inlaid with silver and gold by the chasing method. H. 63 mm. L. 122 mm. Br. 107 mm. Property of Nationalmuseum, Stockholm.

PLATE XLV.

HAN STYLE.

Fig. 1—2. Axle mounting in two separate parts. It is not definitely established that these two parts actually belong to one another. Both possess a rich Han profile and an extremely elegant spiral pattern in gold and silver. The heavier of the two pieces has in the interior a diametrically placed iron peg with an animal's head in bronze on the surface of the axle cap. It is likewise richly decorated with gold and silver. The spirals in the lighter, outer mounting are more delicate and are executed in finer and richer detail. The two pieces appear to have been the work of different hands. A hook is fixed to the heavier mounting on the outside of its narrower section. The height of the heavier mounting is 85 mm., that of the other is 118 mm. Mr. A. Hellström, Mölndal, possesses a pair of mountings composed of pieces such as here described, and Mr. Axel Lundgren, Stockholm, possesses another pair. All four pieces were acquired at the same time and are reported to have come from a grave at Chin Tsun, E. of Loyang, which is stated also to have been the source of a number of other small bronzes, all inlaid with silver and gold. Several of these pieces are now in the Toronto Museum (see W. C. White: Tombs of Old Lo-Yang, Shanghai, 1934).

The Chinese axle-cap was fixed to the vehicle in a stationary position, the wheels alone rotating. The hook on the heavier mounting was probably used for fastening the trace attached to one of the outside horses.

The gold and silver inlay was done by means of chasing, i. e. depressions were made in the surface of the bronze, and into these were hammered narrow or broad strips of gold or silver plate.

Fig. 3. (H. R. H. 857.) Tip of a staff of bronze, with a rich pattern in low relief and chased with gold and silver. On the cylindrical under-part of the piece are a couple of characters chased with gold. On the circular surface of the upper end there is also a rich spiral ornamentation and in the centre a circular pattern of spirals. H. 84 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 4. (H. R. H. 927.) Bronze mounting in the shape of a snake's head. It was evidently affixed to some more perishable material. For the purpose of attachment the piece is shaped at the back into four triangular teeth. The head is hollow and possesses a rich décor in gold and silver. Granulated portions and lines have been done by the chasing method (for the granulations shallow holes have been made in the surface of the bronze and gold thread inserted into them, the threads being clipped off and made secure by being hammered). On other parts of the head thick, broad gold and silver plates cover the bronze like mail. These plates were probably affixed to the bronze base by means of soldering. L. about 62 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. (H. R. H. 998.) Cylindrical bronze cap (tip of a ceremonial staff) ornamented with a narrow zigzag band and oxygonal triangular fields decorated with engraved gold ornamentation (praying figures and phoenixes). L. 73 mm. Diam. 18 mm. Property of H. R. H. the Crown Prince of Sweden.

PLATE XLVI.

HAN STYLE.

Fig. 1. Ko handle of bronze, richly chased with silver. At the top is seen a recumbent animal, the head of which is delineated so as to form the silhouette of the handle. Green patina. L. 123 mm. From Shouchou. Property of Mr. Th. Laurin, Stockholm.

Fig. 2. (A. H. 885.) Seal holder. Fired-gilt bronze. Technique: cire perdue. This object is in the shape of a four-footed dragon, whose body is bent into a loop. Out of the dragon's mouth emerges a straight metal rod, in the end of which is a square hole. The holder is partially covered with blue and green patina. It comes from Shouchou. L. 141 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 3. (A. H. 887.) Comb or brush holder of bronze. Technique: cire perdue. The piece consists of a handle-part, of fired gilt, possessing a complicated animal pattern and rich perforations, that is to say, giving an animated silhouette effect and also a rectangular, hollow part forming the mount, with a decoration of chased gold on a dark ground. The decorative style of the handle-part shows the strong influence of the animal nomad style. One can distinguish amidst the somewhat confused motifs a tiger attacked by another tiger and its tail seized by a bird. At the top is a dragon. Dark patina. H. 85 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 4. (H. R. H. 1038.) Seal holder or staff head of bronze. Technique: cire perdue. Exquisitely clear-cut, neat design. Beautiful dark patina with patches of dull green. The object comes from Shouchou. L. 140 mm. Property of H. R. H. the Crown Prince of Sweden.

Fig. 5. Ko handle, broad in form and simple in its silhouette. Technique: cire perdue. Ornamentation chased with silver. Green patina. From Shouchou. L. 122 mm. Property of Mr. Th. Laurin, Stockholm.

PLATE XLVII.

HAN STYLE.

Fig. 1. Bronze belt-buckle. The buckle itself is plain and its forward end roughly made, while at the back the stem is bent back and to it is attached the plain circular boss. Standing on the bent part above the boss is a large fly. Greyish-green patina. L. 109 mm. Property of Professor O. Sirén.

Fig. 2. Small bronze belt-buckle in the form of a bear holding a dagger and a shield in its front paws and other weapons in its hind paws. Dark patina. L. about 95 mm. Property of Kunstmuseum, Copenhagen.

Fig. 3. (A. H. 150.) Bronze belt-buckle, on its upper-side the head of a bird of prey with a large glass bead in its forehead. In its entirety the buckle is in the shape of a bird with long neck and a fairly broad tail. Dark green patina with lighter patches of red and green. L. 112 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 4. Bronze belt-buckle, fired-gilt on the surface. A baroque group. The hook ends in a bird's head. The buckle in its entirety represents a dolphin-like monster. A small, round, long-hafted boss is affixed beneath the monster's head. Dating from the Han dynasty or later. Patina dark brown—green. L. 79 mm. Property of Professor O. Sirén.

Fig. 5. (A. H. 897.) Bronze belt-buckle with gold and silver mountings. The goldsmith's work exhibits a strongly individual artistic character from the Han period. There is turquoise inlay on the lyre-shaped tail. The whole composition is fantastic and complicated, the principal motif being an armadillo-like quadruped done in high relief, its eyes inlaid with glass. The entire bronze core is coated with thick silver and gold plate. The finely executed goldsmith's work, the complexity and the personal touch exhibited in the composition, are features that recur in a whole series of Chinese objects, mainly belt-buckles, dating from the Han dynasty. Manifestly we are here dealing with a veritable master of his craft with a taste for baroque and possessing a very high standard of skill. L. 137 mm. Property of Mr. Anders Hellström, Mölndal.

PLATE XLVIII.

HAN STYLE.

Figs. 1—2. Smallish bronze belt-buckle belonging to the short, oval Han-style group. Richly chased gold ornamentation. The pattern on the upper-side consists of broad meanders and granulations. On the under-side are meanders forming a renaissance-like pattern. On the boss is a circular decoration — a three-armed whorl. The surface of the bronze is blackish brown. L. 91 mm. Property of Kunstmuseum, Copenhagen.

Fig. 3. Bronze belt-buckle belonging to the rhomboid group. The metal mouldings consist of bronze inlaid with silver; there is also turquoise and gold inlay. Brown patina, and green incrustations. L. 211 mm. Property of Professor O. Sirén.

Fig. 4. Large bronze belt-buckle similar to the preceding one and belonging to the same group. The technique and the inlay are likewise similar. Green incrustations. L. 207 mm. Property of Professor O. Sirén.

Fig. 5. Bronze belt-buckle dating from the Han dynasty, possibly quite early in that period. Technique: *cire perdue*. The pattern is in low, flat relief with sunken parts filled with turquoise. The entire surface has been coated with a thin layer of silver-coloured metal. The upper-side of the buckle is divided into two longitudinal friezes ornamented with spirals and both ending at the back in a pair of fox-like carnivore heads with pointed ears and a square in the forehead. Red and green patina. L. 131 mm. Property of Mr. Anders Hellström, Mölndal.

Fig. 6. A long and narrow, gilded bronze belt-buckle (bow-shaped group). The upper-side inlaid with jade (4 stones) and turquoise (2). Both the rear end and the hook are shaped like plain dragon-heads. Further, on the upper-side are a tiger's head with pointed ears and the head of a crow with turquoise eyes. The crow holds in its beak a piece of jade. The patina is in part dark brown and in part green. L. 192 mm. Property of Professor O. Sirén.

PLATE XLIX.

HAN STYLE.

Fig. 1. Bronze belt-buckle (elongated oval group), the under-side flat and undecorated and the upper-side strongly convex with chased gold and silver ornamentation (representations of birds turning partially into meanders). Richly granulated in gold and silver. The boss, which is of medium size, is decorated with a three-armed whorl ornament. Brown patina. L. 135 mm. Property of Professor O. Sirén.

Fig. 2. Curved belt-buckle of bronze (bow-shaped group) inlaid with silver and gold. Only the front surface is richly ornamented. The ornamentation

consists of meanders and transverse zones executed in broad silver bands. The many-whorled spirals are made with fine gold-thread chasing. Dark brown patina with patches of green. L. 174 mm. Property of Kunstdindustrimuseum, Copenhagen.

Fig. 3. Medium-sized bronze belt-buckle, flat and undecorated on the under-side, on the upper-side convex and decorated with chased and overlaid work in silver. The short-hafted, round boss is attached to the under-side just behind the middle of the piece. The front of the buckle is in the shape of a bird with wings and a tail and a dragon's head. The patina is partly brown and partly green. L. 147 mm. Property of Professor O. Sirén.

Fig. 4. Medium-sized belt-buckle with silver inlay on a chocolate-brown copper ground. Bands of meanders, spiral volutes and granulations done in silver. The decoration is generous and gay. Presumably late Han period or possibly even later. The back part is hollowed out, but it is bridged by a superstructure, to which the boss is fastened. The boss is decorated with a three-armed whorl of inlaid silver. L. 133 mm. Property of Kunstdindustrimuseum, Copenhagen. The Nationalmuseum, Stockholm, owns a piece that matches this buckle. Both appear to have been acquired through Dr. Fredrik Martin in 1919.

PLATE L.

HAN STYLE.

Fig. 1. Bronze belt-buckle, bejewelled, with a complicated animal motif. The boss, which is large and circular, is fixed to the middle of the under-side and is decorated with a three-armed spiral. The hook is fashioned like the head of a bird of prey. The other end of the buckle is shaped like an unsymmetrical knob. The principal motif in the decoration is a standing, winged demon with the head of a bird of prey. He grasps a fish and pecks at its head with his powerful beak. The fish was evidently detachable. Gold-chasing here and there. In addition, the buckle was originally inlaid with gems. L. 160 mm. Property of Professor O. Sirén.

Fig. 2. Bronze belt-buckle, in the form of a mascaron with long trunk ending in a bird's head. The mascaron divides into four snakes coiled round a turtle. The patina is red and green. L. 113 mm. Property of Professor O. Sirén.

Fig. 3. Bronze belt-buckle with a complicated animal motif. The piece terminates in a dragon's head. Its stem terminates at the back in the head of a beast of prey biting at the breast of a long-necked bird, which is already dead. A two-clawed paw, obviously the monster's, grips the bird by the tail. The composition, which possesses clearly defined Chinese details, has been strongly influenced by the animal nomad style. The shape is clumsy and baroque. May be dated at the end of the Han dynasty or later. Reddish-brown patina with greenish-grey incrustations. L. 122 mm. Property of Professor O. Sirén.

Fig. 4. Belt-buckle of gilt bronze. The stem and hook are fashioned like a dragon's head with long neck. The body of the buckle is in the shape of a dragon, its coils forming an 8 and its fangs gripping its belly. The dragon's eyes are of gold. The boss has a long haft and is attached in the centre beneath the body of the buckle. Green patina. L. 126 mm. Property of Professor O. Sirén.

Fig. 5. Belt-buckle of fired-gilt bronze, baroque in design (baroque group) and executed in the Sarmatian style. The buckle is in the shape of a dragon's head with long neck. The body of the buckle is fashioned like a coiling, many-winged tiger fighting a serpentine dragon. In the middle of the back of the body is a small circular boss with a haft of medium length. Green patina. The Han dynasty or later. L. 176 mm. Property of Professor O. Sirén.

PLATE LI.

HAN STYLE.

Fig. 1. Bronze mirror. The reflecting surface convex. The knob in the centre of the decorated side is hemispherical. The patina has the gleam of steel, with blue and green incrustations. The mirror comes from Chin Tsun, Loyang. Diam. 151 mm. Th. 6.5 mm. Property of Mr. A. Lagrelius, Stockholm.

Fig. 2. Bronze mirror. The reflecting side is only slightly convex. The décor has the gleam of a silvery metal, with patches of green malachite and blue lazulite. Diam. 116 mm. Th. 4 mm. Property of Mr. Axel Lagrelius, Stockholm.

PLATE LII.

HAN STYLE.

Fig. 1. Bronze mirror. The reflecting side convex. Hemispherical knob on the decorated side. Lead-coloured patina with green incrustations. Dated: Wang Mang (9—22 A. D.). Diam. 225 mm. Property of Mr. A. Lagrelius, Stockholm.

Fig. 2. Bronze mirror with slightly convex reflecting side. In the centre of the decorated side a fairly small hemispherical knob. Dull black patina. Diam. 110 mm. Th. 10 mm. Property of Mr. A. Lagrelius, Stockholm.

PLATE LIII.

HAN STYLE.

Fig. 1. Bronze mirror with convex reflecting side. It probably dates from the 3rd or 4th cent. A. D. and is fairly typical of the conventionalized tendencies and embroidery-like décor, as well as the careless line-drawing characteristic of the Later Han style. Diam. 116 mm. Property of Mr. A. Lagrelius, Stockholm.

Fig. 2. Bronze mirror. Eastern Han. The reflecting surface convex. The knob in the centre of the decorated side is in the shape of a somewhat flattened hemisphere and is fairly large. In this mirror may be observed the first tendencies towards raising the relief — a typical feature in many series of mirrors dating from the transitional centuries between Later Han and Tang. Steely patina with patches of green. Diam. 188 mm. Th. 6 mm. Property of Mr. A. Lagrelius, Stockholm.

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## POSTSCRIPT

When this paper was already in the press we received W. Ch. White's monograph »Tombs of Old Lo-Yang», Shanghai, 1934, which proved the necessity of reconsidering the dating of some objects described above. Without pretending to give a review of this volume, which will certainly in due course give rise to considerable discussion, we have found it unavoidable to give place to certain new facts made known by White.

The author of »Tombs of Old Lo-Yang» was for 37 years a resident of China, during many years of which he was Church of England bishop in the Canada Mission with his residence in Kaifeng, the capital of Honan. Because of his meritorious work of collecting and studying the early historical antiquities of Honan he has recently been appointed Associate Professor of Chinese Archaeology at the University of Toronto and Keeper of the East Asiatic Collection of the Royal Ontario Museum. With a full knowledge not only of the spoken and written Chinese language but also of the mentality of the people of Honan, he was from his residence in the provincial capital in an exceptionally favourable position to follow the archaeological developments within that province. The ample funds at his disposal for the purpose of enriching the Chinese department of the Ontario Museum gave him the means of keeping in friendly touch with those who collected the relics of ancient Honan.

In the Spring of 1929 there began an ever-increasing supply of bronzes and other objects stated to have come from a number of tombs situated in the north-eastern corner of old Lo-Yang, the ancient capital of the Chou and Han times, which is located approximately 10 English miles east of modern Lo-Yang.

This necropolis consists of eight main tombs marked in the plan I—VIII and three minor unvaulted tombs marked in the plan A, B, C.

White believes, upon very doubtful evidence, that this necropolis contained the graves of princes of the Han (韓) clan,<sup>1</sup>) a feudal state under the Eastern Chou which remained in existence until 230 B.C. when it was annexed by Ch'in. He gives a rather detailed description of the construction of the tombs accompanied by a plan and a longitudinal section of tomb no. V. It is not stated to what extent his description is based upon autopsy, but much in it goes to show that he had to depend mostly upon local people connected with the excavation work. If this guess comes true, it goes without saying that there must be many uncertain points in White's description of the tombs. Still, to everyone familiar with the local conditions, it seems apparent that Bishop White under rather delicate circumstances has acted wisely and discreetly, when he extracted from the people who brought specimens to him much useful information which would have been

<sup>1</sup>) Well to be distinguished from the Han (漢) dynasty.

entirely lost to science, had not this experienced and tactful observer persistently worked to record the progress of the diggings.

For reasons given below we can here leave out of consideration the construction of the tombs, as the evidence is hardly conclusive enough to help us in solving the problem here at hand.

The age of the necropolis is held to be fairly well settled, thanks to the occurrence, according to White, in tomb VII of 14 bells carrying an inscription.<sup>1)</sup> The numerous papers, mainly Chinese, which have dealt with this inscription have been critically reviewed by Professor Karlgren in a separate paper, published in this volume. His review strongly supports the opinion held by the majority of commentators that the date 550 B. C. is the most likely one.

537 objects, mostly bronzes, said to have come from these tombs, have been examined by White who illuminates his description with no less than 187 plates.

A review of White's monograph in the light of the chronological system adopted for our exhibition, seems to prove that the objects described and reproduced by him may be classified under the following headings:

1. *Specimens of Middle Chou style*, only some few specimens: no. 053, bronze standard top (plate XXV), the bronze bell, no. 507 (plate CLXXII) and possibly some human figures (plate LXXVI—LXXXIII) which we have been accustomed to associate with Chou bronzes.

2. *Specimens of Huai style*. Very numerous. Remarkable representatives of this group are the bronze corner piece, no. 032 (plate XVIII), the bronze mask ring handles no. 103 (plate XL), the majority of the mirrors, the large bronze bottle-shaped vase no. 253 (plate CXIV), and the Piao bells 501, 502 (plate CLXVII, CLXVIII).

3. *Objects which we are accustomed to consider as belonging to the Han period*.

To this group belong first of all a number of belt buckles which we have been accustomed to label as related to the Sarmatian objects of southern Russia. Plates LVII—LIX of White's book give examples of this type.

More important is the very big group of objects from the Lo-Yang tombs, the main characteristic of which is an abundant inlay of gold and silver, occasionally also turquoise in geometric patterns, the chief features of which are spirals and curved triangular figures. Typical specimens of this very abundant group are the bronze bottle, no. 262, reproduced in colour and drawing, furthermore the oxen skull Pl. I, the handles and finials Pl. IV—VII, the specimens Pl. IX, the bronze tubes Pl. XVII, the monster head finial Pl. XXIV, the mirror Pl. XLVII, the bronze bottle Pl. CXII, etc. In fact, this is one of the most important stylistic groups of the old Lo-Yang tombs.

When we now turn to a discussion on the age of the Lo-Yang objects it must be kept in mind that, as far as we can judge from White's description, he had

<sup>1)</sup> It should not be overlooked that Sū Chung-shu in his description of the bells gives a quite different locality — Kung Hsien!

to depend in the matter of the provenance of the objects solely upon the reports of scientifically untrained agents who approached him in order to dispose of the unearthed treasures. Under such circumstances it could hardly be avoided that even such a skilled and critical collector as Bishop White may have been brought to accept some specimens of doubtful provenance. Furthermore, there is the possibility of the tombs having contained objects of different ages, some contemporaneous with the building of the tomb, others already centuries old when they were deposited in the newly constructed tomb.

Above all, there is another circumstance of considerable importance. As stated above, there are eight major and three minor tombs. It seems not quite unlikely that the major tombs represent a succession of headmen of the clan in which case these eight tombs might represent something like 200 years. At any rate it should not be overlooked that there are several tombs of possibly somewhat different ages. We know from Bishop White's description that the main bulk of objects was derived from tombs V and VII, but unfortunately we have nothing like a reliable inventory of the contents of each individual tomb.

Considering all these uncertain factors it may be prudent to limit our analysis to such facts that cannot be disputed.

Let us then return for a moment to the now famous bells with their Piao inscription, relating certain historical facts giving to the bells a date which is under no circumstances later than 380 B. C. but more probably 550 B. C. (compare Karlgren's paper).

We take it for granted that the Piao bells are really *authentic ancient specimens*. They have been examined by a number of Chinese scholars and consequently we may be justified in accepting them as being beyond doubt.

As to their provenance there seem to be conflicting statements. Sü Chung Shu gives in his »Piao shih pien chung k'ao shih» Kung Hsien as the locality, whereas White states them to have been found in one of the Lo-Yang tombs.

These Piao bells (plate CLXVII—CLXIX) carry in their lower part the typical pattern of teeming hooks and volutes», so characteristic of the Huai style. This fact is still more evident in Sü Chung-Shu's book »Piao shih pien chung k'ao shih», and from this evidence we have already suggested in our guide of Sept. 1933 that the Huai style should be dated back to 550 B.C.

Very fortunately there is among the objects described by White a square bronze bowl which may carry us a step further. This specimen no. 252 (Pl. CXIII) is so important that I quote here verbatim White's description of the decor:

»Large square bronze bowl with indented rectangular decorative zones. The top rim, which was .6" wide, was inlaid with gold in geometrical patterns, with malachite or turquoise inlays separating the designs.

Below this was a recessed border, 1.25" in width, also inlaid in geometrical patterns with malachite at angular points. The metal inlay was copper and silver.

Below this border the remainder of the bowl was made up with indented

recesses of rectangular form giving it a chequer-board appearance. The whole surface of these rectangular zones was covered with very fine spiral designs in low relief, with a background of line spirals and angles. The rim at the bottom was also decorated with this spiral design.»

The low relief decoration of the lower half of the vessel is a typical instance of the teeming hooks and volutes of the Huai style.

The importance of this vessel lies in the fact that the two upper zones are decorated with gold, silver and turquoise inlays in that style of spirals and triangles which has been generally held to characterize specimens of the Han period. To judge from this vessel where the two styles are combined in one and the same piece, it seems unavoidable seriously to reconsider the dating of several gold and silver incrusted specimens back to a time not later than the beginning of the fourth century B.C.

Let us now try to decide how far this conclusion will influence our previous dating of certain specimens inlaid with gold and silver.

First of all it should be kept in mind that there are undoubtedly numerous bronzes of Han and even as late as Sung and Ming with inlays in gold and silver in patterns more or less reminding us of the inlaid bronzes of the Lo-Yang tombs.

On the other hand we hardly know any metal inlay in bronzes of the Yin and Chou styles. There are An-Yang bronzes with inlays of turquoise, and many vessels reported to have come from An-Yang have the deeper parts of the pattern filled with a black, probably bituminous substance which may have served as a kind of inlay purposed to emphasize the details of the design. Both these technics may be interpreted as a kind of precursor of the gold and silver inlay technic which as far as we know began with the introduction of the Huai style.

After having presented these remarks we may be prepared to enumerate those gold and silver inlaid specimens in our plates which have been marked by us as belonging to the Han style, but which may in fact be associated with the style of the Lo-Yang tombs, even to the extent that some of them very probably formed part of the furniture of those tombs.

Pl. XLV, depicts three objects, fig. 1, 2 and 4 which we consider to have quite likely come from the Lo-Yang tombs. Fig. 1, bronze finial belonging to Mr. Axel Lundgren, shows striking similarity to no. 014 (Plate VI of White's monograph) and approaches still more strikingly no. 178, pl. LXXIII. The snake head, fig. 4, belonging to H. K. H. The Crown Prince, shows much affinity to the animal head no. 015 (pl. VI). Fig. 2 of the same plate, axle-cap, is closely related to White's no. 117 (pl. IX) and 118 (pl. VIII).



**Yin style: Ceramic sherds from An Yang.**  
Figs. 1 - 3  $\frac{3}{4}$ , figs. 4 - 9  $\frac{2}{5}$  of nat. size.





1



2



3



5



4

**Yin style: Stone objects from An Yang**  
 $\frac{4}{5}$  of nat. size.







Yin style: Ivory and bone objects from An Yang.  
 $\frac{3}{4}$  of nat. size.





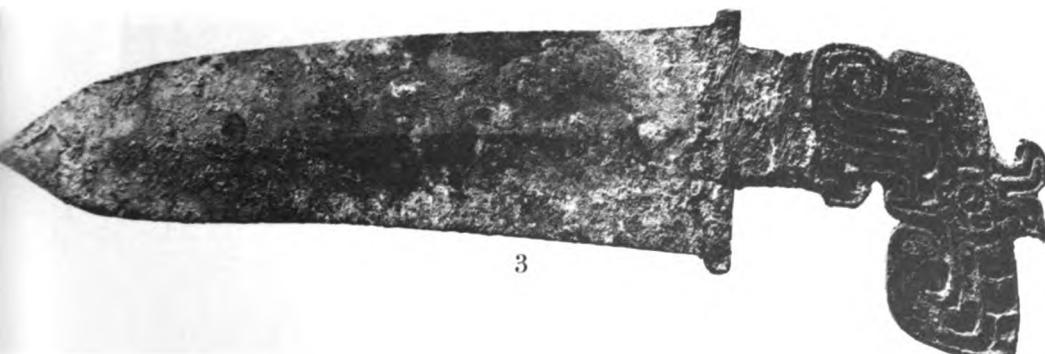
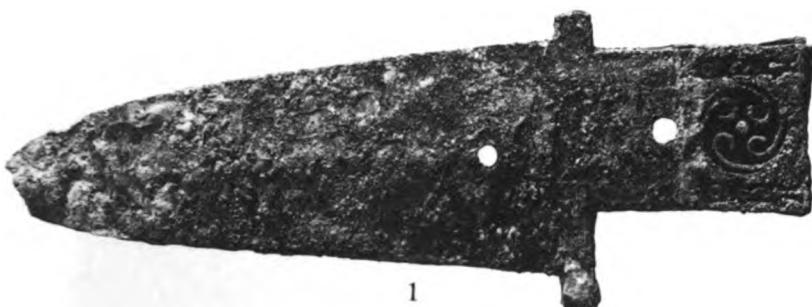
**Yin style: Bronze Ting from An Yang.**  
**3/4 of nat. size.**





**Yin style: Bronze objects from An Yang.**  
 $\frac{4}{5}$  of nat. size.



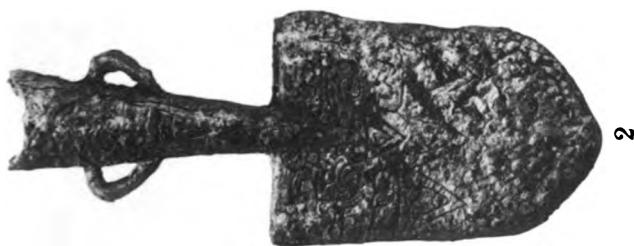


Yin style: Three bronze Ko from An Yang.  
1/2 of nat. size.





1



2



3

Yin style: Bronze weapons from Au Yang.  
 $\frac{1}{2}$  of nat. size.





Yin - Chou style: Bronze Ting.  
1/3 of nat. size.





Yin - Chou style: Bronze Ku.  
3/4 of nat. size.





Yin - Chou style: Bronze tripods.  
1/2 of nat. size.





1



2

**Yin - Chou style: Bronze vessels of Yi (fig. 1) and Ting (fig. 2) types.**  
*2/5 of nat. size.*





Yin - Chou style: Bronze object.  
1/2 of nat. size.





**Yin - Chou style: Bronze dagger axe.**  
**1/2 of nat. size.**





1

Yin - Chou style: Bronze axes.  
Nat. size.



2





1



2

Yin - Chou style: Side-pieces of bronze bridles.  
Nat. size.







Bronze objects with Kuei dragons.  
 $\frac{1}{2}$  of nat. size.





Middle Chou style: Bronze Tui.  
 $\frac{1}{2}$  of nat. size.





Middle Chou style: Bronze Ku.  
2/3 of nat. size.





1



2

Middle Chou style: Jug and tripod of bronze.  
 $\frac{1}{3}$  of nat. size.







Middle Chou style: Bronze buffalo.  
 $\frac{2}{3}$  of nat. size.





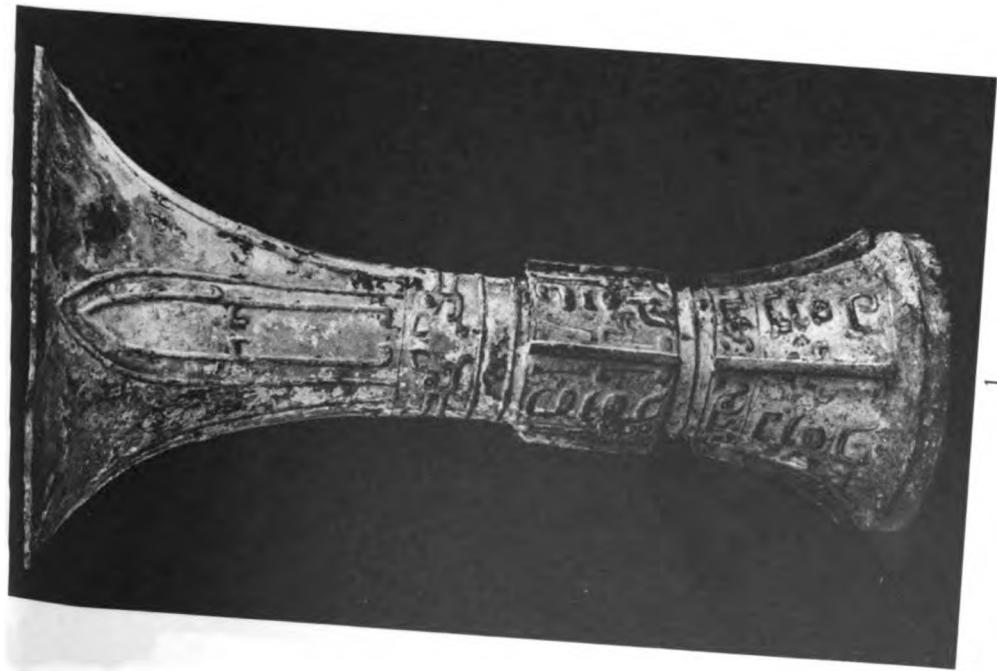
1



2

Middle Chou style: Bronze Tui.  
1/2 of nat. size.





1



2

Middle Chou style: Bronze Ku.  
1/2 of nat. size. 2: *Cr. 1*





1



2



3



4



5



6

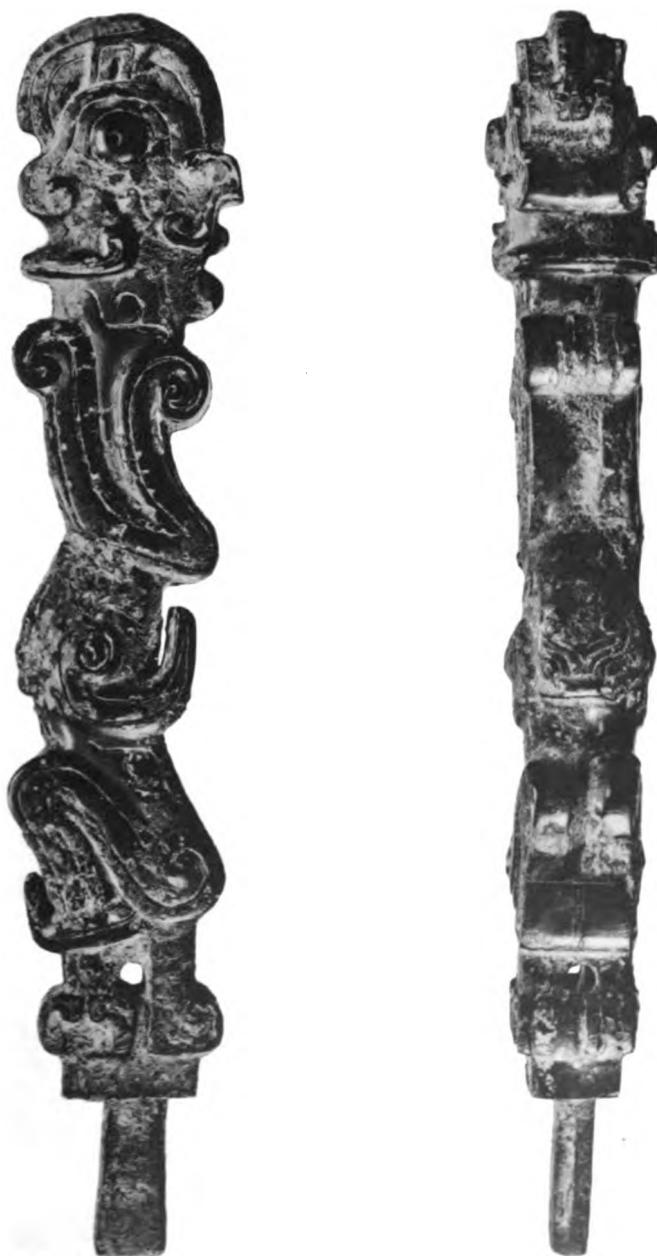
Middle Chou style: Bronze objects various kinds.  
 $1/2$  of nat. size.



Middle Chou style: Bronze mountings of various kinds.  
Fig. 1  $\frac{1}{2}$  of nat. size, figs. 2-6 nat. size.







Middle Chou style: Bronze demon, handle of a weapon.  
Nat. size.



Middle Chou style: Horse fittings.  
Figs. 1, 2, 4, 5 1/2 of nat. size, fig. 3 1/3 of nat. size.







Huai style: Bronze bell, Chung.  
1/4 of nat. size.





Huai style: Bronze bell, Chung.  
3/7 of nat. size.







Huai style: Bronze vessel, Hu.  
 $\frac{1}{2}$  of nat. size.





2



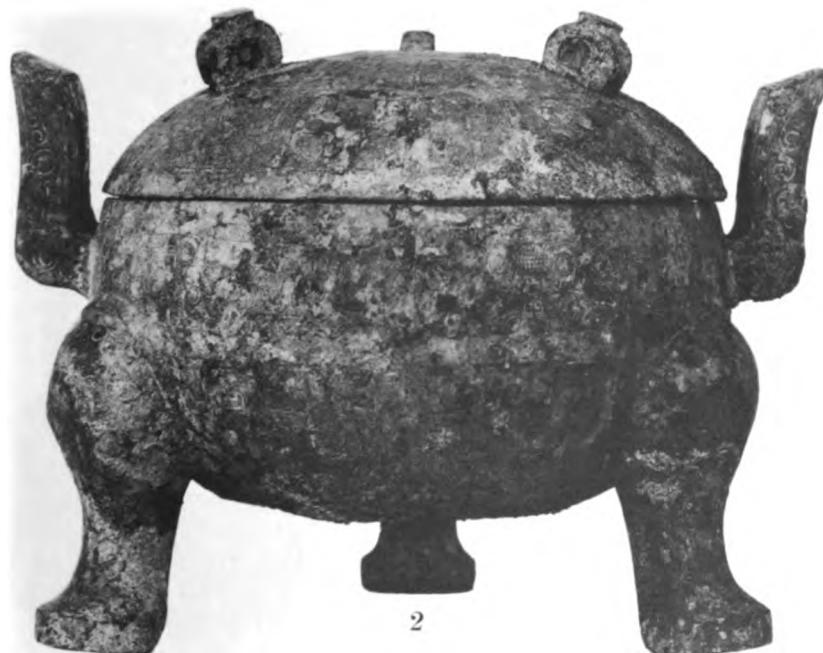
1

Huai style: Fig. 1 Bronze urn. Fig. 2 Bronze double Tou.  
 $\frac{1}{3}$  of nat. size.





1



2

Huai style: Bronze bowl and bronze Ting.  
 $\frac{1}{3}$  of nat. size.





1



2

**Huai style:** Fig. 1 bronze bowl. Fig. 2 Bronze axlecap.  
 $\frac{4}{5}$  of nat. size.







Huai style: Bronze bowl.  
 $\frac{4}{5}$  of nat. size.





Huai style: Bronze tiger.  
Nat. size.





1



2



3



5



4



6

**Huai style: Fragments of various bronze objects. Figs. 3 - 6 from the Li Yü find.  
2/3 of nat. size.**





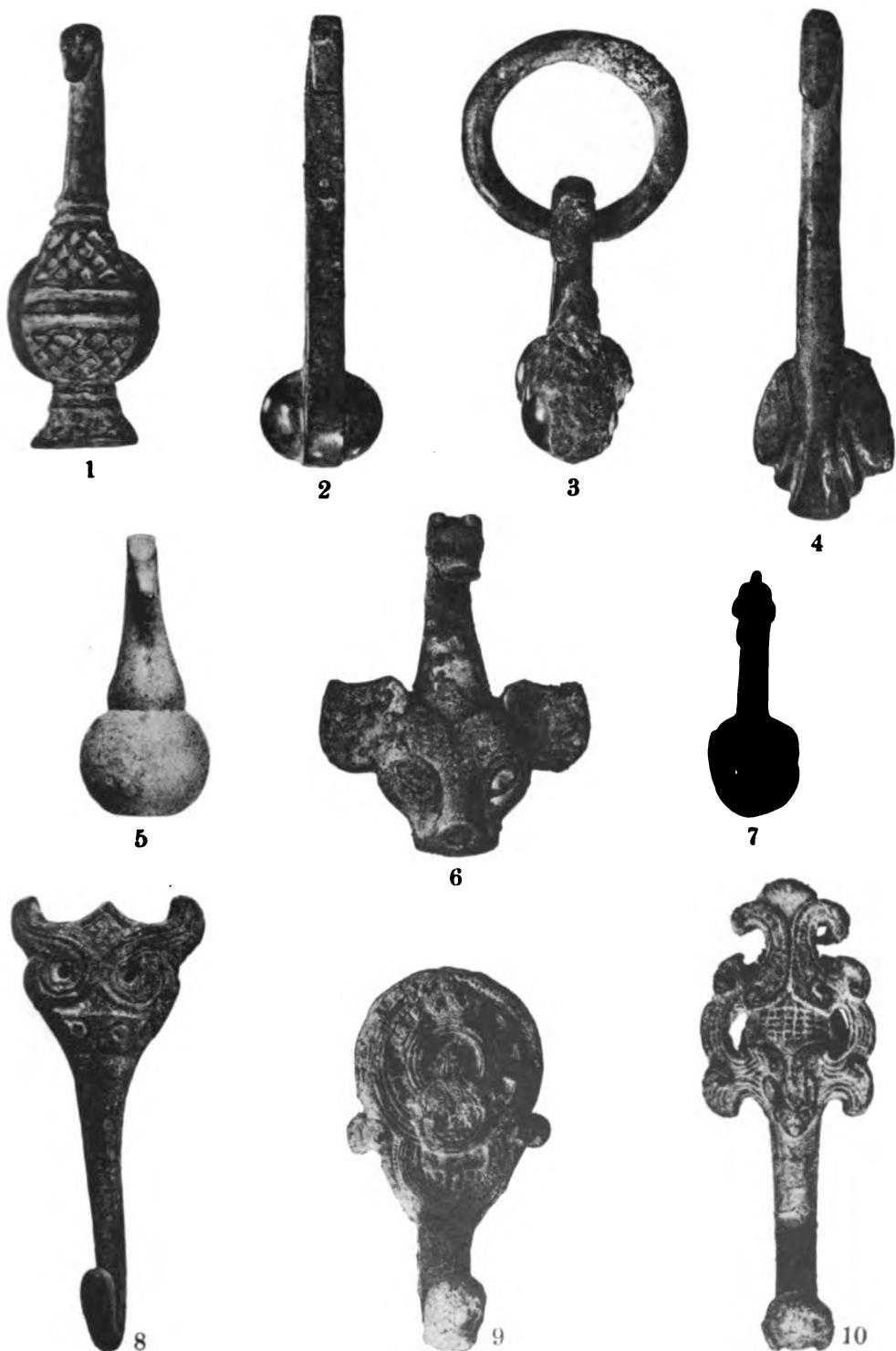
Huai style: Various bronzes: Fig. 1 Handle, Figs. 2 - 4 Ko-handles, Figs. 5 - 6 axle-caps.  
 $\frac{3}{4}$  of. nat. size.





Huai style: Belt-buckles (belt-hooks).  
Nat. size.





**Huai-Han styles: Bronze belt-buckles (belt-hooks).**  
Nat. size.





1



2

Blending of Chou and Huai styles: Bronze mirrors.  
 $\frac{2}{3}$  of nat. size.





1



2

Huai style: Bronze mirrors.  
Nat. size.





1



2

**Huai style: Bronze mirrors.**  
 $\frac{3}{4}$  of nat. size.





1



2

Transition style Huai - Han: Bronze mirrors  
Fig. 1  $\frac{4}{5}$ , fig. 2  $\frac{2}{5}$  of nat. size.





1



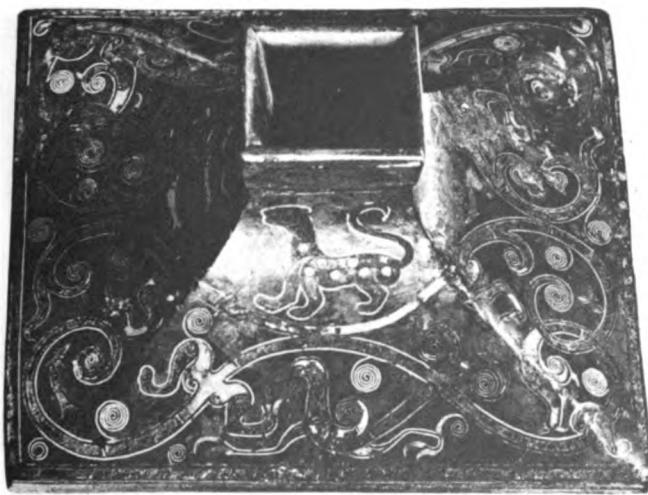
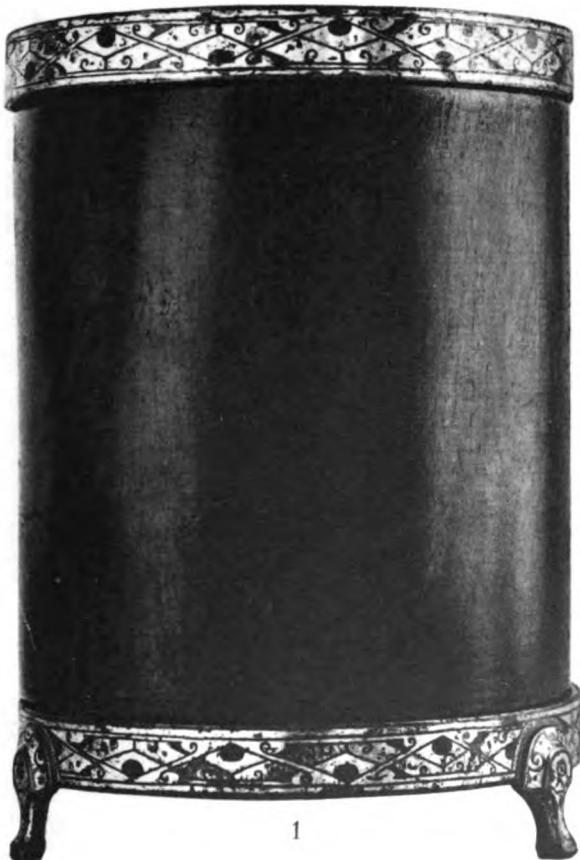
2



3

**Han style: Bronze vessels.**  
 $\frac{1}{3}$  of nat. size.





**Han style:** Fig. 1 bronze linings on a cylindrical vessel. Fig. 2 bronze lid.  
 $\frac{2}{3}$  of nat. size.





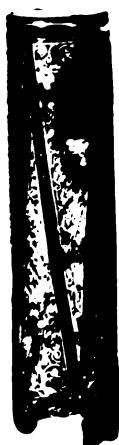
3



1



4



5



2

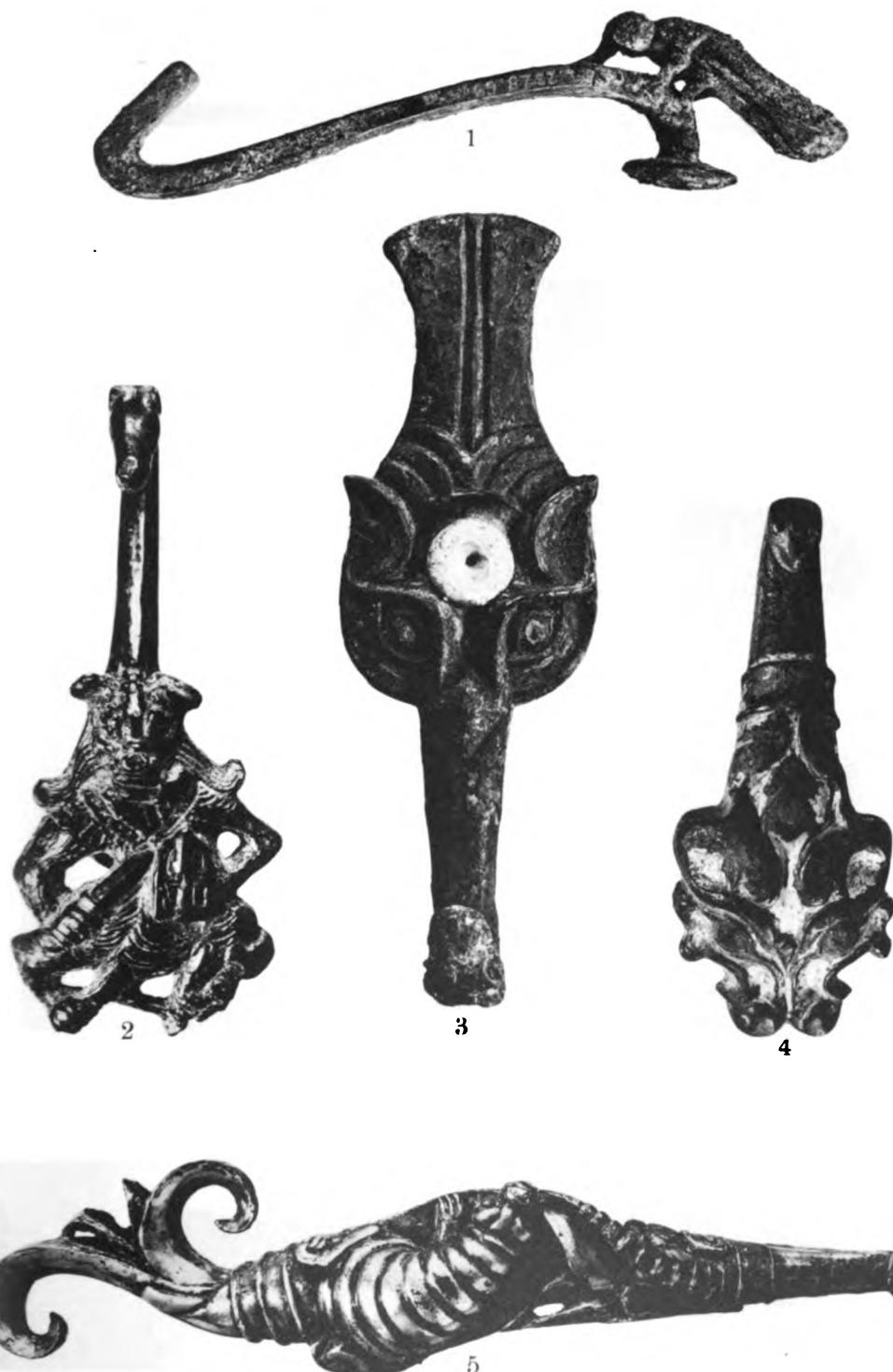
Han style: Bronze mountings.  
 $\frac{3}{4}$  of nat. size.





Han style: Figs. 1, 6 Ko-handles, figs. 2, 4 seal holders, fig. 3 comb or brush holder of bronze.  
 $\frac{4}{5}$  of nat. size.

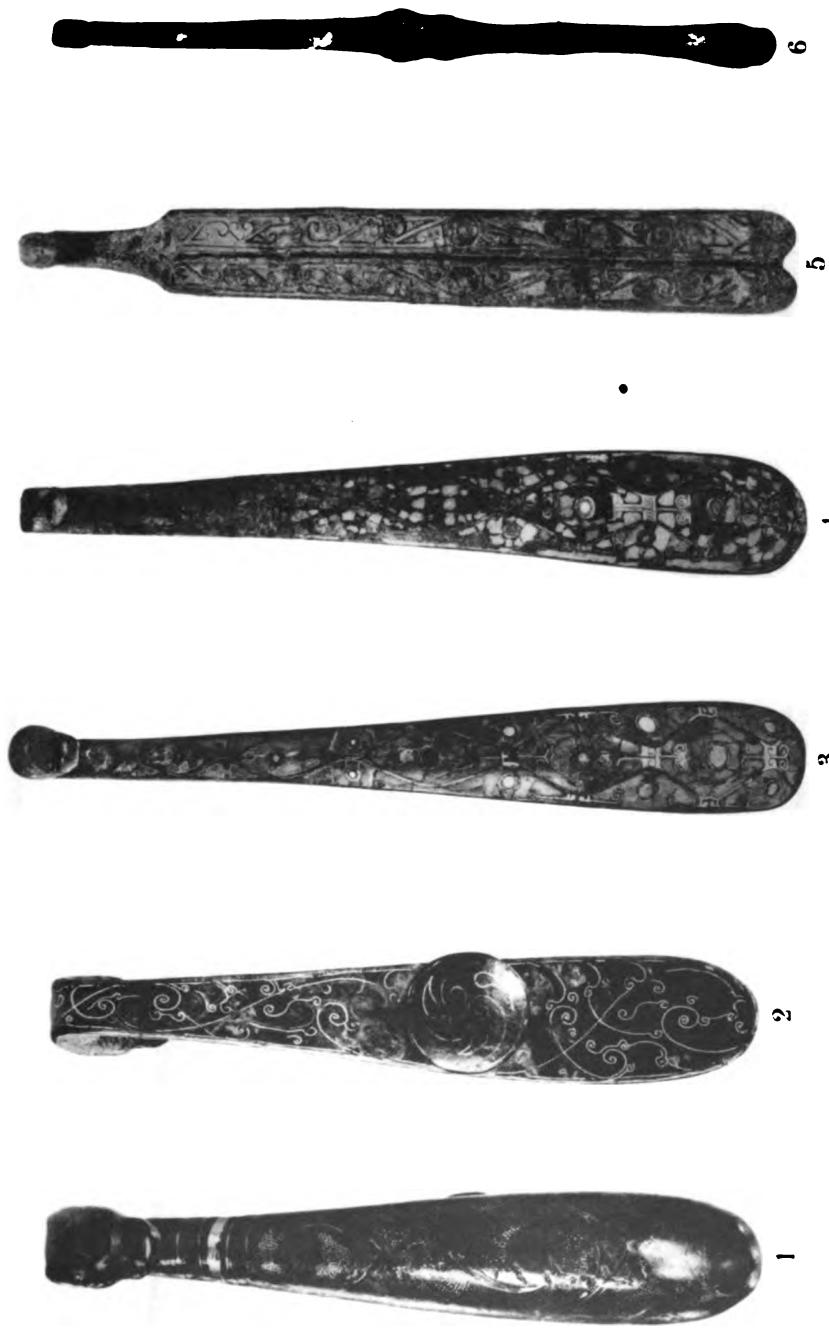




Han style: Belt-buckles.  
Nat. size.







Han style: Belt-buckles.  
Figs. 1, 2 nat. size, Figs. 3-6  $\frac{1}{2}$  of nat. size.





Han style: Belt-buckles.  
Nat. size.





Han style; Belt-buckles.  
 $\frac{3}{4}$  of nat. size.





Han style: Belt-buckles.  
 $\frac{3}{4}$  of nat. size.





1



2

Han style: Bronze mirrors.  
Fig. 1  $\frac{3}{8}$ , fig 2  $\frac{3}{4}$  of nat. size.





1



2

**Han style: Bronze mirrors.**  
Fig. 1  $\frac{3}{8}$ , fig 2  $\frac{3}{4}$  of nat. size.





1



2

Han style: Bronze mirrors.  
Fig. 1  $\frac{3}{4}$ , fig. 2  $\frac{1}{2}$  of nat. size.



# ON THE DATE OF THE PIAO BELLS

BY  
*BERNHARD KARLGREN*

To the archaeologist it is essential to know how far the dating of the Piao bells — with their typical Huai style of decoration — can be relied upon. If the inscription is not incised but cast in the way stated by Bishop White, it cannot be a later addition, it must be authentic. And if the dating to 550 B. C., indicated by Liu Tsie, Wu K'i-ch'ang, and T'ang Lan (all in the Bull. Nat. Libr. Peip. vols. 5, 6, 7) and by Sü Chung-shu (*Piao shī pien chung t'u shī*) — as against the date 380 proposed by Kuo Mo-jo (*Kin wen ts'ung k'ao*, p. 240 ff.) — can be considered as safe, it is certainly justifiable to make these bells the starting point for a revision of our dating of the Huai style.

In this long inscription there are many characters the deciphering of which is very uncertain (such are n:is 9, 14, 29, 32, 40), and others, though easily readable, are susceptible of several interpretations. The authors mentioned have given proof of much acumen in discussing these points. For our purpose here it is necessary to set aside all the doubtful details and concentrate upon the passages which are absolutely certain. I give, therefore, first a tentative translation of the whole inscription, eclectically made after those various authors, but only as a kind of introduction. The important points, which are safe, I will single out, one by one, afterwards.

»In the 22nd year Piao K'iang made x; his prince the chief of the Han house [named] X led [an army, or armies] and attacked Ts'in, attacked Ts'i, entered Ch'ang-ch'eng (The Long Wall) and first joined [the allied armies] in P'ing-yin; with extreme bravery and relying on their force they made a rush and captured Ch'u's capital; he (Piao) was rewarded by the chief of the Han house, was distinguished by the Duke of Tsin, was received in audience by the Son of Heaven; therefore he illustrated and recorded it in this inscription; military and civil . . . renown for eternal generations not be forgotten.»

The essential and reliable points are the following:

- 1) That the 12th character has to be read Han, and is the name of the feudal house Han<sup>2</sup> (I write it so in order to distinguish it from the Han<sup>4</sup> of the Han dynasty), which was one of the three (Han, Wei, Chao) that annihilated the venerable state of Tsin and divided its territory in 376 B. C., is absolutely certain. Liu Tsie first read it *yang* 'bright', but in Bull. Nat. Libr. 7 he has given up this idea and joined the others, who all agree upon the reading Han. As Ma Heng and Sü Chung-shu point out, we have the very graph of the inscription in the indubitable sense of Han<sup>2</sup> on archaic seals. The bells were found in or very close to the domain of the Han<sup>2</sup> house in the period of the Warring States, and the in-

scription has a phrase about a recompense from the Duke of Tsin who was the feudal chief of the Han<sup>2</sup> house down to 403 B. C. So there is no possible doubt about the reading Han. The entire phrase *küe p'i Han tsung* 'his prince the chief of the Han house' as a whole must be said to be quite certain (*küe* having first been misread *shi* and later on identified). The man Piao K'iang celebrated in the inscription thus was a henchman of Han<sup>2</sup>.

2) Readable and unambiguous is the opening phrase »in the 22nd year« — an attempt by Wu K'i-ch'ang to read »23rd year« instead of »22nd« must be said to be a failure.

3) Quite safe and unambiguous is the clause »led [an army, or armies] and attacked Ts'in, attacked (the proper meaning of the character being either 'to start against' or 'to press, harass' — the general sense being the same) Ts'i, entered Ch'ang-ch'eng (The Long Wall) and first joined [the allied armies] in P'ing-yin«. The readings Ch'ang-ch'eng and P'ing-yin are amply supported by archaic inscriptions. It is absolutely certain that this P'ing-yin is the same place which is mentioned in Tso-chuan (18th year of Duke Siang of Lu, i. e.): 555 B. C.: »In the winter, 10th month, [Tsin and the allied forces] met on the River Tsi in Lu . . . and jointly attacked Ts'i. The Prince of Ts'i withstood them at P'ing-yin; he dug a moat at Fang-men (»Dyke Gate«) a *li* wide and kept it guarded . . . On the last day of the 10th month the army of Ts'i fled during the night; on the first day of the 11th month [the allied forces] entered P'ing-yin and thereupon pursued the army of Ts'i«. The P'ing-yin in question is the P'ing-yin-hien in T'ai-an-fu of Shan-tung, which in Ch'un-ts'iu time belonged to Ts'i. The chapter Kün-kuo chi of the Hou Han shu among the places of T'ai-shan-kün enumerates in a sequel P'ing-yin (same as in Tso chuan above and the P'ing-yin of our inscription), Fang-men (same as in Tso chuan above) and Ch'ang-ch'eng (The Long Wall, same as in our inscription). The Shuei king chu says: »The Tsi river flows from Lin-yi-hien to the East, and then in the North passes to the West of P'ing-yin«. The same work says »Ten *li* to the S. W. of the old city-wall of P'ing-yin there is the Ch'ang-ch'eng (Long Wall)«. The Kuo ti chi says: »The Ch'ang-ch'eng (Long Wall) of Ts'i in the West starts at P'ing-yin hien.« The Chu shu ki nien (the authentic one, as quoted by Shuei king chu, Wen shuei) says: »In the 20th year of King Huei of Liang (= Wei) (i. e. 351 B. C.) Ts'i built earth-works at Fang, and made the Ch'ang-ch'eng.« I have quoted this last passage because it might seem to prevent our inscription, which mentions the Ch'ang-ch'eng of Ts'i, being dated earlier than 351. But that is not so. It is a well-known fact that the various »Long Walls« (there were three of them, see De Groot, Die Hunnen der vorchristlichen Zeit p. 46) were not built at a stroke but consecutively, piecemeal, during long periods and gradually connected into longer units. So the Chu shu ki nien entry furnishes no »terminum a quo«. The truth of this assertion is proved by another passage out of the same Chu shu ki nien (quoted in Shuei king chu, Fen shuei): »In the 12th year of Duke Lie of Tsin (408 B. C.)

King-*tsi* of Han, Lie-*tsi* of Chao and Ti Yüan attacked Ts'i and entered the Ch'ang ch'eng.» So we see that the Long wall of Ts'i was not commenced in 351.

4) In the phrases: »Was rewarded by the chief of the Han<sup>2</sup> house, was distinguished by the Duke of Tsin, was received in audience by the Son of Heaven (i. e. the King of Chou)», there are two points that are discussable, but they are not essential. Some authors read *pin yü* Tsin Kung »was honourably treated (as a guest) by the duke of Tsin», whereas others read (*ling* ==) *ming yü* Tsin Kung »had honour conferred upon him by the Duke of Tsin» — the general trend of thought being the same; the *chao* of the phrase »Chao yü t'ien ts'i» can be interpreted either as »was received in audience by the Son of Heaven» or: »made a solemn report to the Son of Heaven». It is fairly indifferent which of these interpretations we adopt; the essential fact is that both the Duke of Tsin and the King of Chou (Son of Heaven) play a prominent rôle as conferrers of grace on the man (Piao K'iang) celebrated in the inscription.

5) More uncertain is the phrase: »By a rush took Ch'u king the capital of Ch'u.» One author wants Ch'u King to be equal to a place Ch'u-k'iu (in Ts'i); another, Kuo Mo-jo, sees in it an abbreviation for Ch'u-kiu and King-shan (two places in Ts'i). This may be worth considering. Yet Sü Chung-shu, who interprets as above (»captured the capital of Ch'u»), follows strictly the very clear text without any alterations or speculations about short-forms.

Which conclusions about the *date* of the inscription can be drawn from the safe points 1—4 above?

In the first place we have a very good date *ante quem*. Tsin was annihilated and its territory divided in 376 B. C.: after that year there was no »Duke of Tsin» (as in phrase 4 above). The bells must be prior to that date.

What is meant by »the 22nd year»? All the interpreters so far have taken it for granted that since the *t'ien-tsi* »Son of Heaven» occurs later in the inscription, it must refer to the King of Chou, and they have adduced other examples of bronze inscriptions following the royal dating through treating of feudal court events. It is indeed very probable that this is right. And yet we should, I think, verify whether there is any other possibility. Since the bells celebrate a henchman of the Han<sup>2</sup>-house, which in its turn had the Tsin as their feudal lords, the only imaginable alternative to the royal Chou dating would be that of the Tsin house. There were seven Tsin dukes who had as long as 22 years' reign: Mu, Wen, Min, Hien, P'ing, Ting and Lie. Their »22nd year» will be 790, 760, 683, 655, 536, 490 and 398 respectively. The first two fall before the Ch'un-ts'iu period (for which we have a detailed knowledge of all the events in the feudal kingdoms), and we have no materials to verify the events about 790 and 760; but we may safely rule out those early dates, with a view to the type of the bells. Among the *t'ien-tsi*, kings of Chou, there are only two who had a 22nd year of reign: Ling-wang (22nd year: 550 B. C.) and An-wang (22nd year: 380 B. C.).

Let us now dress a table of all the years when Tsin or its great vassal houses Chao, Wei and Han had wars with Ts'in and Ts'i from the beginning of the Ch'un-ts'i period (722 B. C.) down to 376 B. C., when Tsin was annihilated. From 722—469 detailed accounts are furnished by Ch'un-ts'i and Tso-chuan, and by Shi ki; from 469—376 we have to draw upon Chan kuo ts'ê, Shi ki, and Chu shu ki nien (the authentic one, reconstructed by Wang Kuo-wei): It should be pointed out that for the period 469—409 the data are exceedingly scanty — many wars must have taken place of which we know nothing; this, however, is of no consequence to our problem, since there was no »22nd year« of any Chou king nor of any Tsin duke during those years. From 409 again the data are rich.

Tsin and its vassal houses (Chao, Wei, Han<sup>2</sup>) at war with:

Ts'in:	Ts'i:
645, 627, 625, 624, 623, 620, 617, 615,	
607, 601, 594, 582, 578, 563, 562, 559,	591, 589, 572, 555, 554, 550, 494, 485,
456, 419, 409, 408, 401, 393, 391, 389,	472, 471, 413, 409, 408, 390, 385, 384,
387, 380.	382, 380, 378.

The bell inscription records *first* an expedition against Ts'in and *secondly* an expedition against Ts'i. It is of course not necessary that they both fall within one and the same year: it may be a record of the events of a number of years in which Piao K'iang took an honourable part. We have to reckon with a latitude of, say, a dozen years.

We can see at once that the 22nd year of Duke Min of Tsin (683) cannot be meant, nor that of Hien of Tsin (655), nor that of P'ing of Tsin (536) nor that of Ting of Tsin (490). There are only three possibilities: the 22nd year of King Ling of Chou (550), when there had been first an attack on Ts'in in 559 and then an attack on Ts'i in 555 (for the details see below); the 22nd year of Duke Lie of Tsin (398), when there had been first an attack on Ts'in in 409 and then an attack on Ts'i in 408 (for the details see below); and the 22nd year of King An of Chou (380), when our table has entries for both Ts'in and Ts'i in that very year (380).

Let us first examine the last alternative, which has been proposed by Kuo Mo-jo. From the table above it would seem very plausible, since Tsin (or rather its heirs) in that very year were at war with both Ts'in and Ts'i. Kuo quotes a passage in the Shi ki partly based on a narrative in the Chan kuo ts'ê, which runs thus in Chavannes' translation (M. H. vol. V. p. 239; I only alter the spelling of the names into my system): »La cinquième année (380) . . . Ts'in et Wei attaquèrent Han; Han demanda le secours de Ts'i. Le duc Huan, de Ts'i, convoqua ses principaux officiers et leur proposa ce sujet de délibération: »vaut-il mieux le secourir tôt ou tard?» Tsou Ki dit: »Le mieux est de ne pas le secourir du tout.» Tuan-kan P'eng dit: »Si on ne le secourt pas, Han cédera et sera annexé à Wei. Il vaut mieux le secourir.» T'ien Ch'en-sî dit: »Ils sont fautifs, vos avis, messieurs. Si Ts'in et Wei attaquent Han, (alors) Ch'u et Chao ne manqueront pas de le

secourir. Ainsi le Ciel livrera Yen à Ts'i.» Le duc Huan approuva ces paroles. Il avertit donc secrètement l'ambassadeur de Han et le renvoya. Han, pensant qu'il était assuré du secours de Ts'i, engagea les hostilités contre Ts'in et Wei; Ch'u et Chao, l'ayant appris, mirent en effet des soldats en campagne pour venir à son secours. Ts'i en profita pour partir en guerre, attaquer à l'improviste le royaume de Yen et lui prendre la ville de Sang-k'iu (in the present Pao-ting-fu)».

So far the text only indicates a war with Ts'in. In order to find a war also with Ts'i, Kuo Mo-jo continues (p. 245): »As we see from this, the events in An-wang's 22nd year (380), when Ts'in and Wei attacked Han, really inveigled and moved the whole country . . . When Han was attacked by Ts'in and Wei, probably it simultaneously sent and asked succour from the three countries Ts'i, Ch'u and Chao. When it had received succour from Ch'u and Chao, it was in a position to repel the army of Ts'in and to make peace with Wei. The people of Ts'i took advantage of the war engagements of all the states and surprised Yen and took Sang-k'iu. When the people of Yen was exposed to the surprise from Ts'i, they certainly simultaneously sent and asked succour from Han, Chao and Wei. Han was annoyed at the Ts'i people's having cheated them and not succoured them; Chao and Wei also were angry at Ts'i's surprise attack on Yen and the consequent danger to themselves. Therefore »the three Tsin» (i. e. Han, Wei and Chao) joined their armies and attacked Ts'i».

This all sounds very plausible, but it does not hold water. It is quite true that »the three Tsin» took revenge on Ts'i; Si-ma Ts'ien records (Chavannes V, p. 241): »La première année (378) du roi Wei, les trois Tsin profitant du deuil de Ts'i, vinrent attaquer notre (i. e. Ts'i's) ville de Ling-k'iu.» But observe that 378 was *two years after* the »22nd year» of An-wang (380)! So Kuo cannot adduce this for the interpretation of an inscription which he wants to date in 380. This is a most dreadful *lapsus* on his part.

But we must press the question further. Si-ma Ts'ien really tells of an attack on Ts'i in 380, though not at all in the connection adduced by Kuo Mo-jo. It is narrated in Wei shi kia (Chavannes V, p. 148): »La septième année (380) Wei attaqua Ts'i et parvint à Sang-k'iu.» But this obviously means an attack not on the *country* of Ts'i but on the *army* of Ts'i, which that very year had captured Sang-k'iu in Yen; an expedition of Wei in Yen (Pao-ting-fu, Chi-li) in 380 can have nothing to do with the expedition of Han against P'ing-yin in Ts'i proper (Shan-tung) as narrated in the inscription. Finally our table indicates wars between Ts'in's heirs and Ts'i in 385, 384 and 382. If these were meant in the inscription, the expedition against Ts'in would not be that of 380 quoted by Kuo (in the inscription, the war with Ts'in comes first, that with Ts'i after) but one of the earlier ones: Ts'in attacked Han in 391 and Wei in 389; Wei attacked Ts'in in 393 and 387. But we need only examine the Ts'i entries for 385, 384 and 382 to realize that they are not relevant, since they do not tally with the inscription. They are mentioned in the Chao shi kia (Chavannes V, p. 55): »La deuxième

année (385) le marquis King (de Chao) battit Ts'i a Ling-k'iu (in the present Tung-ch'ang-fu, far away from P'ing-yin); la troisième année (384), il secourit Wei à Lin-k'iu (in the present Ts'ao-chou-fu, far away from P'ing-yin), et fit essuyer une grande défaite aux gens de Ts'i; la cinquième année (382) Ts'i et Wei . . . attaquèrent Chao et prirent notre (Chao's) ville de Kang-p'ing». None of these expeditions can have the slightest connection with the expedition against Ts'i mentioned in the inscription. They are all wars between Chao and Ts'i, and we have no data about Han<sup>2</sup>'s joining Chao, nor do the geographical data tally.

Kuo Mo-jo's interpretation (380 B. C.) thus fails entirely to agree with the facts of the inscription. Liu Tsie has adduced another objection to it: In 380, four years before Tsin was extinguished by Han<sup>2</sup>, Wei et Chao (376), a recompense given by the Duke of Tsin would not have figured in the eulogy of a henchman of the Han<sup>2</sup> house; all the more since the power of the Tsin princes had long been reduced to a minimum, and entirely usurped by the three great vassal houses, Chao, Han<sup>2</sup> and Wei.<sup>1)</sup>

I am not so sure that this argument about the *power* of the ducal house of Tsin is conclusive. Not in China; the ritual prestige could very well survive the political influence by many years, just as the King of Chou was a great power, morally and ritually, for centuries after he had lost his political influence. But the matter should be turned round in another way. In 380 a henchman of the Han<sup>2</sup> house would certainly not have taken tokens of distinction (*ming*) from the hand of the Duke of Tsin; but that was *not* because the duke was politically weak, but because Han<sup>2</sup> had been officially recognized as an independent state by the Chou king already in 403: the Duke of Tsin was no longer the feudal chief of the Han<sup>2</sup> house, nor of its sub-vassals! This is absolutely decisive against the date 380.

Let us now examine the data about the 22nd year of King Ling, 550 B. C., vindicated by all the other interpreters to be the key to our inscription. They have been nicely summed up by Sü Chung-shu.

Year 560: The Duke of Tsin wished to make Han K'i (the head of the Han<sup>2</sup> house) commander of the first army; Han K'i declined, and finally he was made vice-commander of this army.

Year 559: Tsin followed by armies from 12 states made a big attack against Ts'in.

Year 557: The Duke of Tsin convoked 9 feudal princes (among which was *not* the Duke of Ts'i) in Ch'ou-liang, and they made a covenant to punish «all those who do not go to the court [of Tsin]», i. e. who do not submit to Tsin as leading state. The following year Ts'i attacked Lu, one of the allies and thereby set itself against Tsin.

<sup>1)</sup> Cf. Si-ma Ts'ien (Chavannes IV, p. 335): "La dix-huitième année (438 B. C.) le duc Ai (i. e. of Tsin) mourut. Son fils Liu, qui fut le duc Yu, prit le pouvoir. Au temps du duc Yu, (le prince de) Tsin, saisi de crainte, allait, contrairement à ce qui aurait dû être, rendre hommage aux princes de Han<sup>2</sup>, de Chao et de Wei; il ne possédait plus que (les villes de) Kiang et K'ü-wu; tout le reste (du pays) était tombé dans la possession des 'trois Tsin'".

**Year 555:** Tso chuan: »In the winter, 10th month, [Tsin and the allied forces] met on the River Tsi in Lu . . . and jointly attacked Ts'i; the Prince of Ts'i withstood them at P'ing-yin etc.» (as quoted on p. 138 above). This is what was called »the expedition of P'ing-yin». It is mentioned later on under that very name. In Tso chuan, year 550, it is narrated that the Prince of Ts'i made an attack on Tsin »in order to take revenge for the expedition of P'ing-yin».

**Year 555:** In the same year, and in connection with this »expedition of P'ing-yin», Ch'u attacked Cheng, in order to save Ts'i, Tsin and the allies having necessarily to succour their ally Cheng.

The last event may or may not stand in connection with the inscription phrase, which *might* be translated: »by a rush took the capital of Ch'u.» The sources do not expressly mention such an expedition to the very capital of Ch'u, and though the last entry of 555 quoted just now makes a war expedition against Ch'u very plausible, we cannot build on this item. Indeed it would be astonishing if such a remarkable feat as the capture of Ch'u's capital were not recorded in the Tso chuan. But the preceding ones are extremely suggestive. Both the expedition against Ts'in in 559 and that against Ts'i in 555 were great and spectacular undertakings, in which a great number of feudal states took part. And the latter, »the expedition of P'ing-yin», agrees remarkably well with one of the entries in our Piao bell inscription, which says »first joined [the allied armies] in P'ing-yin». (The expedition against Ts'i in 555 was followed up in 554 by a short new expedition, and in 550 Ts'i went to counter-attack). Since all the facts adduced by Sü tally so nicely with the data of our inscription, it is indeed very tempting to accept the solution that the date of the inscription is really 550 B. C.

But before we do so we have to examine the third possibility: the 22nd year of Duke Lie of Tsing, i. e. 398 B. C. If Piao K'iang in that year, for some reason or other (the building of a temple? a birth-day?) wanted to commemorate the great exploits of his life, the big expeditions in which he had taken an honourable part, he could very well speak about the big events of the years 409 and 408, i. e. deeds but a decade old. These events were as follows:

Shi ki, Wei shi kia (cf. Chavannes V, pl. 138): »The 16th year (409) (the Prince of Wei) attacked Ts'in and built walls at Lin-tsin and Yüan-li.» Wei was one of the »three Tsin», and though it is not expressly stated, it seems possible that he was but the leader of combined Tsin forces (Han and Chao forces as well). The expedition was very successful, as seen by the walling of Lin-tsin (West of the Yellow River, T'ung-chou-fu in Shen-si). The attack was repeated the following year (cf. Chavannes V, p. 139): »408 (he Prince Wen of Wei) attacked Ts'in in the West; he came as far as Cheng and then returned; he built walls at Lo-yin and Ho-yang (Shen-si)». (The entry in 401 was only a small counter-attack from Ts'in).

Chu shu ki pien (ap. Shuei king chu, Fen shuei): »In the 12th year of Duke Lie of Tsin (408) the King [of Chou] ordered King-ts'i of Han<sup>2</sup> and Lie-ts'i of

Chao together with Ti Yüan to attack Ts'i; they entered the Ch'ang ch'eng (Long Wall.)» (The entry for 409 concerns an attack by Ts'i on Chao, also recorded in the Chu shu ki nien).

At first sight this alternative seems almost as tempting as that of 550 — all the more so since it would tally better with the Huai style of decoration of the bells. Let us weigh up the evidence:

Though the inscription would have been made a decade later (398), the big war expeditions had taken place and the reward would have been given in 409 and 408, at a time when the Duke of Tsin was still the feudal lord of Han<sup>2</sup> and hence over-lord of Piao. Therefore, that »he was distinguished be the Duke of Tsin» was quite rational and natural; there is no obstacle here of the kind that forbids the year 380.

The data about the Ts'i expedition are about equally favourable in both alternatives. The Tso chuan text for 555 indicates the battle place of P'ing-yin, which is also mentioned in the inscription; here, the Chu shu ki nien for 408 says »entered the Ch'ang ch'eng (Long Wall.)» — the very words of the inscription. The one testimony is a good as the other. And in one important respect the alternative 408 for the Ts'i expedition would be greatly superior to the alternative 555: *the Ts'i expedition of 408 was ordered by the King of Chou*. Our inscription says: *chao yü t'ien ts'i* »he was received in audience by the Son of Heaven» (or: »he made a solemn declaration to the Son of Heaven»). This is very significant: the king had ordered the expedition of 408 (against Ts'i, with invasion of the Ch'ang ch'eng, as in our inscription), and after having completed the task the success was duly reported to and recognized by the King of Chou. After the Tsin expedition against Ts'i in 555 there was no plausible reason why Piao should be received by — the King of Chou! Moreover, for the expedition of 408, it is expressly stated in the Chu shu ki nien that Han<sup>2</sup> was one of the principal forces (Han<sup>2</sup> and Chao); in 555 it is only said that Tsin led various other countries against Ts'i.

But there are two disadvantages connected with this 398 alternative, one of which is not, however, so very serious.

The minor one is this: it may seem questionable whether Piao in 398 would have dated his inscription »the 22nd year» i. e. of Duke Lie of Tsin. As already pointed out, Tsin had ceased to be the feudal lord of Han<sup>2</sup> already in 403, when the King of Chou had made Han<sup>2</sup> independent. Why then, should the year be indicated by a Tsin date? This objection is less serious than it might appear. When Piao (possibly) partook with success in the great expedition against Ts'i in the year 408, it was undoubtedly »the 12th year of Duke Lie of Tsin»; so it is recorded in the Chu shu ki nien, which were the official annals of Tsin and Wei; it would be quite understandable and even natural if Piao continued to reckon with that system of year-dating, all the more since the same duke (Lie) was still living, and 398 was undeniably his »22nd year». In other words: the independence of

**Han<sup>2</sup>** was so recent that Piao's former over-lord, Duke Lie of Tsin, in whose 12th year he had distinguished himself, was still living and had his »22nd year of reign»; Piao kept to the old year denomination system which was current when he experienced his life's greatest exploits. This, at least, is by no means excluded. The second objection is much more serious. The expeditions against Ts'in (409 and 408) are only recorded in the *Wei* annals of Si-ma Ts'ien, not in those of **Han<sup>2</sup>**. In 559, when Tsin, as such, went to war against Ts'in, it is absolutely certain that troops from all the three great vassal houses of Tsin: Han<sup>2</sup>, Chao and Wei, partook in the war. Now, 150 years later, the ducal Tsin was reduced to practically nothing, and Han<sup>2</sup>, Wei and Chao operated separately, often at war with each other. It is just possible, but no more than possible, that Han<sup>2</sup> troops followed Wei against Ts'in in 409 and 408. Since we have no formal entry about it in any text, as far as I know, we cannot build upon it: one of the »three Tsin» (Wei) was at war with Ts'in in 409 and 408, so much is certain; but whether Han<sup>2</sup>, the feudal lord of Piao K'iang, was a participant in the expeditions remains an open question.

This last objection to the year 398 is, of course, very serious. If we build on the Wei attack against Ts'in in 409 and 408 for explaining our inscription, we are building on a mere hypothesis. I am therefore convinced that, after all, we must decide in favour of the solution proposed by the Chinese scholars: the year of the inscription was 550 B. C. This is the only year in the whole of the period 722—376 which can satisfy the inscription entirely, without the slightest hitch.

In the preceding discussion we have taken 376 B. C. to be a perfectly sure *terminus ante quem*: in that year Tsin was extinguished; after 376 there was no Tsin kung, Duke of Tsin, who could be mentioned as a conferrer of distinction in an inscription. But I wish to revert to that point: is that, after all, absolutely certain? It might be argued — though so far I do not think it has been done — that the expression Tsin kung »Duke of Tsin» might mean, not a proper Prince of Tsin but a Prince of Han<sup>2</sup>, and that the »22nd year» was that of a Prince of Han<sup>2</sup>. We know that the three states Chao, Wei and Han<sup>2</sup> were sometimes called *San Tsin* »the three Tsin» and that the Prince of Wei (also called Liang) at the time of Mencius (about 300 B. C.) called his country »Tsin» (Mencius, Legge p. 134); this usurpation of the name of Tsin might have been even more natural to the Prince of Han<sup>2</sup>, who was a scion of the ducal house of Tsin. If that were so, we might think of two princes of Han<sup>2</sup> who both had a 22nd year: Prince Chao, whose 22nd year was 337 B. C.; and Prince Li (also called Hi), whose 22nd year was 274 B. C. If we imagined that one of these years is meant in our inscription, then we would have to translate the clause of point 4 above somewhat differently: »he was rewarded in the ancestral temple of the house of Han<sup>2</sup> and was distinguished by the Duke of Tsin» (= the Prince of Han<sup>2</sup>, either Chao or Li). But there are two obstacles to such an interpretation. The first reason is that Han<sup>2</sup> in the years before those dates (337 and 274) had no successful wars

with Ts'in and Ts'i. We know its history quite well, year by year (it is conveniently pieced together in Tschepe, *Histoire des trois royaumes Han, Wei et Tchao*, 1910). Prince Chao, except that he was attacked and badly beaten by Ts'in as early as 358, had no other wars with Ts'in and Ts'i before 337, so the year 337 is out of question; Prince Li himself attacked Ts'in, but that was as early as 293 and he suffered a disastrous defeat; again he was beaten by Ts'in in 286. By the command of Ts'in he went to war against Ts'i in 284. These three events can certainly not be glorified in an inscription of 274.

The second reason is that the inscription would never have had the term *Tsin kung* 'the Duke of Tsin'. For, as we can gather from the *Chan kuo ts'è* (Han<sup>2</sup>, 1st paragraph), the Prince of Han<sup>2</sup> had usurped the title of *wang* 'king' already by about 450 B. C. In Si-ma Ts'ien, it is true, Prince Chao is still called *Han<sup>2</sup> hou* 'The Marquis of Han', and it may be that the terminology of the *Chan kuo ts'è* is anachronistic; the point is not very important so far as Prince Chao is concerned, since Chao had no wars at all with Ts'i. But all the rulers of Han<sup>2</sup> from his successor, Suan-huei, quite officially had the title of *wang* 'king', and so Li wang, who really had wars with both Ts'in and Ts'i (though two of them bad defeats) was never called anything but *wang* 'king'. So it is excluded that in 274 he could be termed *Tsin kung* 'the Duke of Tsin' in a eulogy. We are therefore brought back to 550 as the only entirely satisfactory solution.

Some words must be added regarding the place where the Piao bells were found. Sü Chung-shu indicates Kung-hien in Ho-nan, a good distance to the East of Lo-yang, south of the Yellow River. The reason for this attribution is that the owner of some of the bells, Mr. Liu T'i-chi of Shanghai, when buying the bells, made inquiries from the curio-dealers and was informed that Kung-hien was the place of origin. Later on Bishop White, when he followed from K'ai-feng-fu the 'excavations' extending over several years of certain graves in Lo-yang-hien, on the site of the ancient Ch'eng Chou in the Eastern part of Lo-yang-hien, was informed that the Piao bells were found in one of these graves. It appears that he has obtained this information entirely through hearsay. It is very unfortunate that no more precise data about the place where the bells were found can be furnished; all the more so since Bishop White dates the whole of this enormously important grave find by aid of this Piao bell inscription.

At first sight one is strongly tempted to disbelieve the account that the bells were found on the site mentioned, in the Eastern part of the district of Lo-yang-hien. As we have seen, the bells must under all circumstances be anterior to 376 B.-C., and down to that time and even down to the reign of King Nan (314—256) the place was in the possession of the royal house of Chou. Why, then, should a henchman of the house of Han<sup>2</sup> be buried in the precincts of Ch'eng Chou?

I think that after all — if it should happen that Bishop White is right — a plausible explanation might be found. When the house of Chou moved to the East from Shen-si to Ho-nan, under King P'ing (770—720) it had there two cities fairly close to each other: Wang-ch'eng (immediately West of the present Lo-yang city) and Ch'eng Chou (said to have been founded centuries earlier by Chou kung) in the Eastern part of Lo-yang-hien. All the kings from P'ing-wang onwards resided in Wang-ch'eng, not in Ch'eng Chou. It was first King-wang who in 516 B. C. moved the royal seat to Ch'eng Chou. There it remained until the time of King Nan (Nan-wang 314—256), who again moved to Wang-ch'eng. All the time between P'ing-wang and King-wang (516), when Ch'eng Chou was not the royal seat proper, it remained, however, a subsidiary capital, containing palaces and treasures. This we can gather e. g. from a Tso chuan entry of the year 674 B. C., when the king in a time of insurrection allied himself with the Earl of Cheng and »entered Ch'eng Chou, took its precious objects and retired» (to a camp at Li). In order to understand the rôle played by the various localities we have to remember that the royal house already from an early date was weak and helpless and was maintained by the patronage of the leading house among the princes. This was from about 630 B. C. and during the whole of the 6th century the house of Tsin and its vassals, and they had often to support the king by their arms. Si-ma Ts'ien tells us for instance (Chavannes IV, p. 313): »La huitième année (613) le roi K'ing de Chou mourut; les ducs du palais et les hauts dignitaires se disputèrent l'autorité... Le duc de Tsin envoya Chao Tun avec huit cent chars de guerre calmer les troubles (du pays) de Chou et mettre sur le trône le roi K'uang.» In 516, when King-wang took up his residence in Ch'eng Chou, the Tso chuan tells us (Legge p. 717) how it was entirely thanks to an army of Tsin that he was able to do so; »the army of Tsin then returned, Ch'eng-kung Pan being left with troops to guard Chou». In the year 510 the Tso chuan narrates: (Legge p. 740): »In the autumn, in the 8th month, the king sent Fu Sin and Shih Chang to Tsin to ask that Ch'eng Chou might be walled. The Son of Heaven said: »Heaven sent down calamity on Chou and made my brothers all have a feeling of insubordination, to the grief of you, my uncle. You princes of my own surname and those of other surnames have not dwelt in quiet [because of my troubles] now for ten years, and for five you have had the labour of guarding my territory... Now I wish... to repair the walls of Ch'eng Chou that my guards may be relieved of their toil...» Fan Hien-tsi [in Tsin] said to Wei Hien-tsi: »It is better to wall the city than to keep on guarding it — as the Son of Heaven has said...» In consequence of this the feudal lords joined in the work of walling Ch'eng Chou.

It seems obvious that the royal court of Chou right from the middle of the 7th c. B. C. could not live safe without the protection of some dominating feudal lord, and this protection could only be effected by *guards* from the leading feudal court kept in the royal capital or its vicinity — if not constantly at least for

considerable periods. It seems equally obvious that for such guard-keeping **the** leading feudal state (Tsin) had to send some high officers as chiefs of **the** garrison. Which was the influential house in Tsin which was most near at hand to take over this important task of answering for the safety of the royal Chou? Evidently the Han<sup>2</sup> house, since it was geographically close at hand. Indeed **the** Han<sup>2</sup> house had taken up its capital in a place which is identical with **the** Wu-chi-hien in Huai-k'ing-fu of Ho-nan in 563 B. C. — a dozen years before the Piao bell inscription was cast (Chavannes V, p. 200). I draw what I think is a very legitimate conclusion when I say — always supposing Bishop White's data about the grave finds are correct — that Piao, a henchman of the Han<sup>2</sup> house residing in Huai-k'ing-fu, was the chief of some garrison force kept in or in **the** vicinity of the royal Ch'eng Chou, the subsidiary capital and outpost of the royal court towards the East. The 8 graves described by Bishop White were therefore perhaps not the graves of successive generations of one family; they may be a row of graves of garrison captains of noble birth.

Whether the Piao bells can or cannot be used as age indicators for the Lo-yang graves is a question in itself, which I think is so far unanswerable — the find data given by Bishop White are hardly sufficient. But this should not lead us away from the principal point: a typical Huai style decoration is found on bells that by their cast inscription are under no circumstances whatever later than 376 B. C., almost with certainty no younger than 398 B. C. and in all probability date from 550 B. C. The only possibility of evading this astonishing fact would be to declare the bells and their inscription spurious. This is *a priori* little plausible, since prominent archaeologists like Sü Chung-shu and Shang Ch'eng-tsu have personally examined the bells. Moreover, the inscription is such as could not have been concocted even by a very ingenious forger — there are a series of details in it which nobody could have thought of introducing — so if the bells are spurious, there must have existed another, genuinely archaic object with this inscription, from which it would then have been transferred to the bells by a forger. This possibility, which *might* have to be reckoned with, seems to me to be very small indeed.

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Is it, after all, necessary to be so very sceptical about the early date of the Huai style, as testified to by the Piao bells? Is this example of its existence in the 6th century B. C. absolutely unique, is there no corroborative evidence? I think we can adduce a very interesting parallel.

In the Tuan Fang collection (T'ao chai ki kin sü lu, shang, p. 5) there is a bell which to judge from the interlaced dragon coils on the lower part is just as typical Huai as are the Piao bells.

There is an inscription on the bell which is of decisive value. The bell and its inscription have been accepted as genuine by the foremost experts on Chinese

bronze art and bronze inscriptions, Wu Ta-ch'eng (K'ia chai tsi ku lu, k. 2: 19) and Wang Kuo-wei (Wang Kuo-wei and Lo Fu-i, San tai Ts'in Han kin wen chu lu piao, k. 1: 5). It records a »son of the King of Sü« as the maker of the bell. Sü is written by the rad. 163 instead of the form with rad. 60 which we know from the Ch'un ts'iu, but fortunately we can prove that these are interchangeable forms; there is a well-known inscription (K'i ku shi ki kin wen shu k. 17: 35) which mentions 鄭王義楚 »I-ch'u, King of Sü«, a person mentioned in Tso-chuan (year 536) and there written 徐義楚. We are therefore in a position to state with absolute certainty that our bell of the Tuan Fang collection was made by a son of a king in the state of Sü, which was a small feudal kingdom situated in Si-chou of the province of An-huei — the very region where we know the Huai art to have flourished. And the important point is that *the kingdom of Sü was annihilated in 512 B. C.* (see Ch'un ts'iu and Tso-chuan under that year). After 512 there was no »King of Sü«, and so this Huai bell can have been made earlier but under no conditions whatever later than 512 B. C.



# DIE FRAGE DER HUAI-TAL-FUNDE

von

DR. A. KOCH/DARMSTADT

(Wir haben in Klammern die Namenformen laut des Wade'schen Systems hinzugefügt. *Red.*)

Die Frühdatierung der Huaital-Funde durch die schwedische Wissenschaft anlässlich der Ausstellung zum kunsthistorischen Kongress in Stockholm 1933 kann durch einige Hinweise gestützt werden, die auch geeignet sind, die Stellung dieser trotz mancher Zusammenhänge doch in sich geschlossenen Denkmalgruppe innerhalb des frühchinesischen Inventars zu klären.<sup>1</sup>

Mehrere Besonderheiten der Huaital-Funde, vor allem die Bronzen von Pferdegeschirren, daneben die Eigenart ihres Zierates, — z. B. die engen Zusammenhänge der Spiegelzierate mit Bildungen auf Fundstücken aus den Noin-Ula-Gräbern, — machen im Zusammenhang mit der auch im übrigen weitgehenden Abgrenzung gegen das vorchristliche chinesische Material darauf aufmerksam, dass man es hier in mehreren Hinsichten mit einer Enklave, kulturell und künstlerisch, in Zentralchina zu tun hat, die, ähnlich wie das Ordosgebiet, nomadische, d. h. nordasiatische Züge aufweist. Wie schon von verschiedenen Seiten her betont, ist es ausserdem undenkbar, dass die ausgeprägte Eigenart der ganzen Gruppe sich, wie man zuerst annahm, innerhalb weniger Jahrzehnte am Ende des dritten vorchristlichen Jahrhunderts entwickelt haben könne; sie trägt vielmehr in allem Züge lang geübter, eigenartiger Tradition, wobei zu beachten ist, dass es bis jetzt nur eine wissenschaftliche Annahme zur Entwicklungserklärung ist, wenn man den Zierat als eine Weiterentwicklung der Chou-Ornamentik zu erklären versuchte.

Diese Sachlage legt es nahe, nach geschichtlichen Nachrichten über das Huai-Tal zu suchen, die weiter zurückweisen als bis zur Verlegung der Hauptstadt des Ch'ou-Reiches [Ch'u] nach Chou-tscheou [Schou-chou, 241], dem einen Hauptfundort, und dessen 221 erfolgter Besetzung durch Ch'in Shi-huang-ti. Nun bestehen tatsächlich ältere Nachrichten über das Huai-Tal.<sup>2</sup> Die berichten die überraschende Tatsache, dass hier nordasiatische Völker angesiedelt wurden, und weisen mindestens in das VII. vorchristl. Jahrhundert zurück. In den Si-ki [Shih-chi] wird für diese Zeit berichtet, das nordasiatische Stämme der Tik [Ti] und

<sup>1)</sup> Das folgende wurde vom Verf. im Verlauf einer mehrjährigen Arbeit an den Fragen des nord-europäisch-nordasiatischen Tierzierates vor nunmehr zwei Jahren festgelegt (nicht veröffentlicht).

<sup>2)</sup> De Groot, J. M. Die Hunnen der vorchristlichen Zeit. Chinesische Urkunden zur Geschichte Asiens. Teil I, Berl. Leipzig. 1921, S. 19.

Dzong [Jung] bis nach Honan eingedrungen waren, dann von den Fürsten von Tsin [Chin] unterworfen und vornehmlich im Huai-Tal angesiedelt wurden. Es handelt sich bei diesem Eindringen um die am weitesten nach Süden reichenden Vorstöße nordasiatischer Nomadenvölker, — eine genauere ethnologische Fixierung würde hier zu weit führen, —; doch dürften es nicht die ersten gewesen sein, wenn die Zeitansetzung De Groots für eine Nachricht des vorletzten Buches des Shi-king [Shih-ching], einen Feldzug des Staates Lu gegen die I, einen nordasiatisches Volk an den Ufern des Huai-Flusses betreffend, in das X. oder XI. Jahrh. zutrifft. Offenbar war die grosse, an Lung-men vorbeiführende Strasse vom alten Lo-yang her des öfteren von einer der die ganze chinesische Frühgeschichte bewegenden Völkerwellen aus den Steppen beschritten worden.

Die Nachricht der Si-ki [Shi-chi] berechtigt zu der Annahme, dass das Huai-Tal seit dem VI. vorchr. Jahrh. einen bestimmten nordasiatischen Bevölkerungszuschuss besass, der unter langsamen Aufgeben seiner nomadischen Lebenshaltung wohl als noch lange gesondert weiterlebend gedacht werden kann. Dieser nordasiatischen Schicht im Huai-Tal muss dass neue Fundmaterial des Flussgebietes zugehört haben.

Damit taucht eine Reihe von Problemen auf, wie vor allem das, welche Voraussetzungen im weiten nordasiatischen Bereich für diese Huaital-Kultur vorhanden sind, die im Rahmen dieses kurzen Hinweises natürlich nicht angegangen werden können, — obwohl der Verf. weitreichende Untersuchungen dahingehend durchgeführt hat, die vor allem in dieser Hauptfrage die oben dargelegte Annahme wesentlich stützen. Selbstverständlich kann daraufhin nun nicht für das ganze Material eine durchgehende Frühdatierung angenommen werden. Grosse Gruppen davon, wie vor allem die Hauptmasse der Spiegel, — die andererseits sich durch Material und Technik von den chinesischen unterscheiden, — müssen im Gegen teil, wie das weitschichtige frühhanzeitliche Vergleichsmaterial — vor allem Einlagearbeiten! — lehrt, sehr nahe an die Hanzeit herangerückt werden. Wesentlich wichtig für den ganzen Fragenkomplex der Huaital-Funde ist zunächst nur die geschichtliche Nachricht einer nordasiatischen Besiedlung des Gebietes im VII. vorchr. Jahrhundert.

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